MODULE I

1. Introduction
2. A History of Typesetting
3. Elements of Typesetting

Itek

The Quadritek 1200

Operator Learning Program

MODULE I

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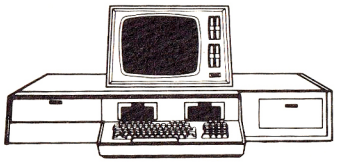
THE QUADRITEK™ 1200 OPERATOR'S LEARNING PROGRAM



What is the Course?

This learning program has been designed to teach the operation of the Quadritek 1200 Phototypesetter from Itek. It is more than just an "operator's manual," for it will take you step-by-step through a series of exercises that allow you to develop knowledge and skills at your own pace. *The Quadritek 1200 Operator's Learning Program* presents small quantities of new information and then helps the learner practice and review, using the phototypesetting system. Each practice and review provides immediate answers so that the learner can measure his or her progress at every point along the way. You will find this method of obtaining information, and then practicing with accompanying progress reports, "reading and doing," superior to reading a basic operator's manual.

What Does the Course Contain?

The program begins with a short history of typesetting and explains the basic elements of typography. It then provides detailed instruction in the capabilities and operation of the Quadritek™ 1200. A number of appendices that contain important reference materials conclude the learning program.

How is the Course Organized?

The program is divided into sections. Each section deals with a single part of the Quadritek™ 1200 operation and, beginning with Section Five, is organized in the following way:

Reading

1. *Introduction* - An introduction briefly describes what the section is about and tells why this topic is important.
2. *Learning Goals* - The reader is told what he will know and be able to do after the completion of the section.
3. *Quadritek Capabilities* - This section describes what the Quadritek 1200 can do.
4. *Procedures* - This is the "why," "how," and "where" of operating the Quadritek. This section will tell you why an action is important, how you control the operation and monitor it, and where the results will be seen. This will help you "know where you're going before you begin. These sections on procedures will later provide quick references to machine functions.

Doing

5. *Action/Feedback* - This is where "learning by doing" begins. The student will follow step-by-step directions in the operation of the Quadritek phototypesetter. After each step, "feedback" will be given. Comparison of these progress reports to your results will tell you how you are advancing.
6. *Reviews* and *Exercises* - Review questions that will help you test your understanding and progress are provided in each section. Exercises in the use of the Quadritek 1200 are also provided to help you practice and test your skills as an operator. The reviews and exercises include sets of answers and examples of completed typesetting so that you can check your work as you go. Completion of each of these reviews and exercises will greatly increase your understanding and skills.

How Do You Use the Course?

This learning program has been designed to expose you to a maximum of information in a minimum of time. For the best results, closely follow this procedure.

Preparation - Make arrangements with your supervisor and co-workers to devote the time to this program. Make arrangements to avoid *all* interruptions. Interruptions will severely decrease your learning speed. To gain a working knowledge of the Quadritek™ 1200 will take three days. The time will vary, depending on your typing skills. In these three days a foundation of knowledge and skills will be established that can be built upon as you gain experience and review the learning program.

Using the Learning Program

1. Read the material and complete the exercises in the order they are presented.
2. Do not pass over any part of the program.
3. New words may be presented. If the word is capitalized it will be explained, with illustration, in the glossary. Refer to the glossary when you find a word you do not understand.
4. Read for understanding, re-reading any portion that may be unclear. Each section of the program uses information learned

in previous sections. This "building-block" approach makes it important that you understand each section before proceeding.

5. When completing a review, cover the answers with a piece of paper. After completing the questions, uncover the answers and compare them to your own. Before moving on, go back and review the portions of the section that relate to the questions you answered incorrectly or were unsure about.
6. Appendices - The appendices located at the back of this program contain a guide to maintenance of the Quadritek, a glossary, a list of proofreader's symbols, and other important material.

At this time, locate the Appendix, acquaint yourself with its contents, and then return to this point.

You noticed that the instructions for you to perform an action were printed in bold type.

7. Bold type is used when you are to do more than just read. When you are to complete a review or operate the Quadritek your instructions will be in **bold type.**

Below is a review of the material you have read so far. **Cover the answers at the right with a sheet of paper and answer the questions by entering your responses in the blanks.** Then uncover the answers and verify your understanding by checking the answers.

REVIEW

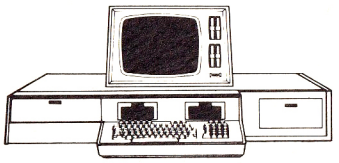
The Quadritek 1200 Learning Program puts all action statements in b_____ t_____. Words that are defined in the g_____ are capitalized. In each section, Procedures will explain the w_____, h_____, and w_____ of Quadritek Phototypesetting.

ANSWERS

bold type
glossary
why, how, where

Proceed to the next section, *A History of Typesetting*

A HISTORY OF TYPESETTING



INTRODUCTION

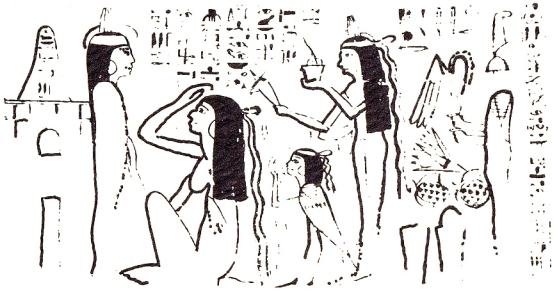
In this chapter the evolution of typesetting will be covered from the invention of TYPE through modern PHOTOCOMPOSITION. In addition, the steps required to produce printed copies, beginning with the original manuscript, will be described.

Learning Goals

At the conclusion of this section the participant will be able to:

1. Define *hot type.*
2. Define *strike-on type.*
3. Define *phototypesetting.*
4. Describe the sequence of events, including typesetting, involved in producing printed copies from an original manuscript.

Typesetting Evolution

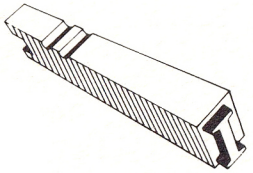


Definition: Typesetting is the assembling of characters of the alphabet into words that relate a message or idea. The first forms of written communication were early cave man drawings. These PICTOGRAPHS were used to relate a message in the same way as the alphabet is used today. Over thousands of years the symbols used to communicate became more abstract until, in ancient Rome, the modern alphabet was developed.

The 26 letter alphabet allowed people to communicate easier and faster because the letter symbols were easy to identify and write. The communication resulting from this advance was still limited, however, by man's ability to reproduce and distribute the finished work. Only the rich and educated could afford to purchase expensive hand-lettered manuscripts. These manuscripts were produced by educated scribes who usually belonged to a religious order. This laborious hand process was the only method of copying or duplicating an original manuscript until the 15th century.

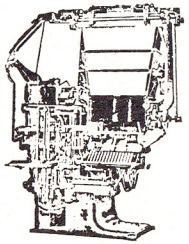
Movable Type

During the 15th century, Johann Gutenberg invented a means of copying manuscripts without the hand lettering. The invention was MOVABLE TYPE — a piece of wood or metal having a letter or character carved on its tip. Words could be formed using the individual characters. These words could then be covered with ink and pressed to paper. This basic *printing* process resulted in the first *mechanically produced* copies of manuscripts, leading finally to the production of the Gutenberg Bible. After printing, the individual letters or characters, referred to as pieces of type, would then be removed and saved for use in duplicating another manuscript. This method of re-arranging pieces of re-usable type was faster and less expensive than hand lettering.



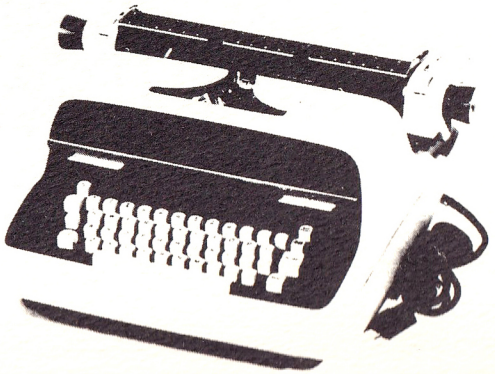
Hot Type

The next major advance in the assembly of type, *typesetting,* came in 1847. In that year, Ottmar Merganthaler invented a machine called the LINOTYPE. With the linotype, the operator sat at a keyboard and pressed the keys for the characters needed. Inside the unit, a mold, called a matrix, of that letter was filled with hot lead. This lead would solidify instantly and the type was ready for use. The mold could then be used to create more characters. Using this method, an operator could produce whole lines of type. After use, the lead chcaracters could be melted down and the lead re-used. The technique of casting type in hot metal, HOT TYPE, was faster than hand-setting individual type elements and met the need created by the demand for increasing amounts of printed material. Other machines which were developed for hot type work were the Intertype, Monotype and Ludlow.



Strike-on

The most common example of STRIKE-ON composition is the typewriter. The typewriter uses a *typing ball* or a *type bar* to create an image on paper. This typing element is either fixed in the machine or is interchangeable with other elements. The operator depresses the key for the character required, the type character strikes an inked ribbon which is forced against the paper, forming the image.

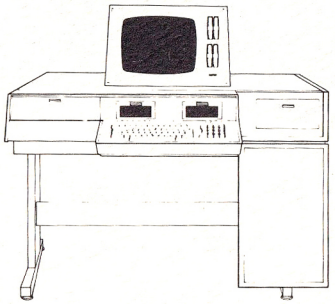


Strike-on composition offeres a fast and economical way to transfer ideas to paper but hot type typesetting is still used for many jobs. Typesetting gives better quality and offers a wide variety of type styles and sizes. However, the cost is high and it requires a high degree of skill to operate the available hot type models. The typewriter on the other hand, with all of its quality limitations for typesetting, is easy to operate and relatively inexpensive. Both hot type and strike-on composition are widely used in typesetting.

In the 15th Century, Johann Guttenberg invented a means of copying a manuscript without having to rewrite it. Through the invention of movable type,

Phototypesetting

In the mid 1940's the first successful use of photography in typesetting was performed by two Frenchmen, Higonnet and Mouroud, with the development of the *Photon Typesetter*. Phototypesetting was also used by Harris Intertype corporation in their *Fotosetter*. This system was little more than a linotype machine with a camera in it. When the operator pressed the character key, a matrix containing a film negative of the character was moved into position between a lamp and the lens. The lamp would then come on and light would show through the negative matrix and expose the photographic paper. The photographic paper was stored and exposed in a light free area formerly occupied by the hot lead casting area. Partially because of this adaptation the vocabulary of hot type was carried into phototypesetting. For example, PICAS and POINTS, used to measure the length of a line or height of a character, came from this earlier era of typesetting.



Computers

The next major step forward came with the adaptation of the COMPUTER to typesetting. This resulted in a final break from the mechanical approach because many of the specialized skills of the operator composing a job could now be handled more easily by the computer. The first phototypesetter connected to a computer was a bulky and expensive unit. With the growth in microtechnology, the computer has been reduced in both *size* and *cost* so that modern typesetters are within the cost range of many

businesses which have traditionally used outside services for quality type.

Quadritek

The Quadritek 1200 represents the state of the art in phototypesetting. The 1200 uses a MINI-COMPUTER which can be PROGRAMMED for an infinite variety of job formats. Because of this sophistication, the Quadritek 1200 has a compact, table-top design, to complement the capabilities and characteristics of operators. The various commands that determine copy format are easily given, using a modification of a standard typewriter keyboard. The Quadritek 1200 gives consistent FEEDBACK during the job to assist in typesetting the kind of work required. In effect, the Quadritek 1200 becomes a working partner in the arrangement of words which will express a message most effectively. tively.

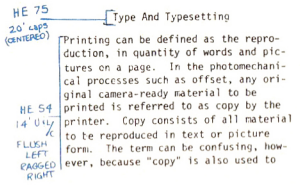
Producing Printed Copies

Manuscript Preparation

The type produced on the Quadritek 1200 will eventually be printed for distribution. The publication you are reading is a good example of this process. Typesetting forms the *middle step* in the flow of graphic communications, from the idea to the final printing. The steps which take place before typesetting are called manuscript preparation. The steps in the preparation of a manuscript for printing are:

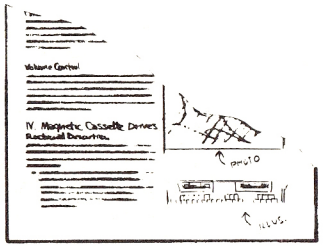
- Author's idea
- Handwritten copy
- Typed copy
- Mark Up —Typed copy is prepared for typesetting by being MARKED UP with the instructions for the typesetter. These instructions identify where and how to set the type.
- A layout sheet shows where the type will be arranged and how the artwork will be positioned on the final copy. The LAYOUT

Author's Ideas
↓
Hand Written Copy
↓
Typed Draft
↓
Mark up
↓
Layout (Comprehensive)
↓
Typesetting
↓
Proofread
↓
Corrected Final Type


HE 75
20' caps (CENTERED)
Type And Typesetting
Printing can be defined as the reproduction, in quantity of words and pictures on a page. In the photomechanical processes such as offset, any original camera-ready material to be printed is referred to as copy by the printer. Copy consists of all material to be reproduced in text or picture form. The term can be confusing, however, because "copy" is also used to
HE 54
14' U+L/C
FLUSH LEFT RAGGED RIGHT

is a representation of the artist's design for the job (sometimes called a COMPREHENSIVE).

- Type is set to match the PARAMETERS established on the marked up copy. These parameters tell how long lines of type will be, the size of the type, etc.
- The typeset copy is PROOFREAD by the author and/or a proofreader, so that errors may be eliminated. PROOF-READER'S MARKS are inserted for any areas which need to be corrected.
- Corrections are made on the Quadritek 1200.

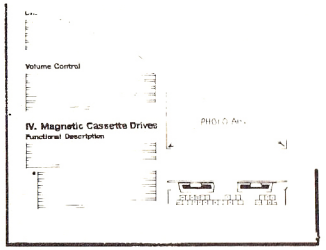


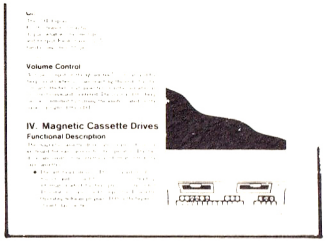
Delete		the ~~bad~~ word
Transpose	tr	the word bad
Set in italic	ital	the word
Make lower case	lc	The word
Insert comma		word word word

Preparation for Printing

After typesetting, the various elements of a job are prepared for printing with the use of specially designed cameras, such as the Itek Camera Processors. The steps to prepare finished typeset copy for printing are as follows:

- Artwork and photographs are arranged to fit the areas shown on the layout.
- These illustrations are combined with the finished type on a PASTED-UP sheet called a MECHANICAL. The mechanical becomes the original from which printed copy will be reproduced.
- The mechanical may be used to create a FILM NEGATIVE which is then used to make a printing surface called a PRINTING PLATE. This plate is then used on a printing press to create duplicate copies.
- *Or,* the mechanical may be used to create a PHOTO DIRECT PRINTING PLATE on a camera platemaker. This plate is then used to create duplicates on the press.



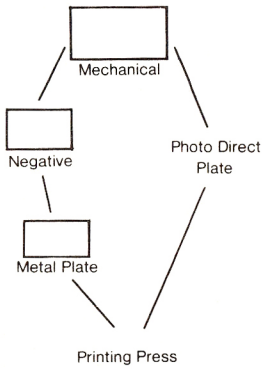


After Printing

After the job has been printed it goes on to FINISHING. During finishing, any of the following could be done.

- COLLATING of pages – arranging in numerical order (Sorting of sets).

- Folding
- Stapling
- Drilling or punching for binding (3-hold binders, etc.)
- Insertion of tabs.
- Padding on tablets.
- Binding with covers.
- Mailing or Distributing.



REVIEW

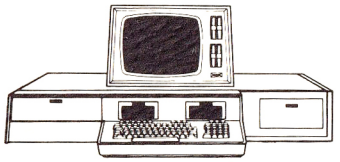
1. Typesetting can be done a letter at a time with m _____ t _____ , or a line at a time with h _____ t _____ that is made by a Linotype machine. s _____ - o _____ composition can be done with a typewriter. The Quadritek 1200 is a p _____ that uses a mini-computer to help set type in whatever format is desired by the operator.

2. After an author's ideas are hand written or typed, the typed draft is m _____ u _____ with instructions for the typesetter. A l _____ shows where on a page type, photos, or other material will be positioned. The manuscript is then typeset and the typeset copy is p _____ by the author and/or proofreader.

ANSWERS

1. movable type, hot type, Strike-On, phototypesetter
2. marked up, layout, proofread

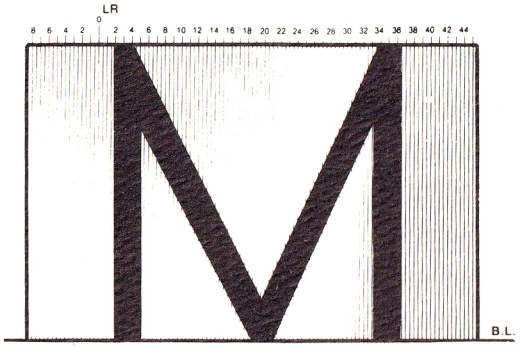
ELEMENTS OF TYPESETTING



Introduction

To learn how to use the Quadritek 1200 you *must* understand all of the "elements of typesetting." Take special care to read, study, and review all of the material here. Completion of this learning program will be impossible without a thorough understanding of all the information presented here.

Over the years, people who create and set type have developed unique terms and measurements to help identify, plan for, and produce typeset copy. In this section the most common terms and measurements as they apply to phototypesetting on your Quadritek 1200 will be explained.



Learning Goals

At the conclusion of this section, the participant will be able to:

1. Define *type design, proportional spacing,* and *mono-spacing.*
2. List the four *major parts of a letter* or piece of type.
3. List the four major *typeface classifications.*
4. Describe and use *mark-up symbols* using the reference list in the Appendicies.
5. Describe and use *proofreader marks* using the reference list in the Appendicies.

Type Design

TYPE DESIGN is the procedure used by an artist or type designer in the creation of a TYPE FACE. In doing this, several concepts must be utilized. The first of these is PROPORTIONAL SPACING. In typesetting the *width,* or horizontal space, occupied by a letter or character is determined by proportional spacing. Each character will have a *different* width value assigned by the type designer. The width value assigned to an individual character or letter is in proportion to the widest letters of the alphabet. The widest letters, *M* and *W*, are assigned the largest width value. The lower case *i*, being the narrowest, is given the smallest width value.

Compare the system of proportional spacing with the MONO-SPACING used in the type-written example at the right. As you can see, the width or space used for each letter on the typewriter is the same no matter how wide the letter may be. The capital *M*, a wide letter, takes up the same space as the *i*, a narrow letter. A major difference between typewritten copy and copy produced on the typesetter is the typeset copy takes up less space and the appearance of each character is easier to read because it is spaced in proportion to its size. The typesetter treats each character individually, assigning each an individual WIDTH VALUE.

The Quadritek 1200 uses proportional spacing, composed of 36 RELATIVE UNITS. In this system, the capital *M* and *W* (the widest letters of the alphabet) are given a value of 36 relative units. The *i*, the narrowest letter is given a value of 10 relative units. The proportion of the letters will vary with the type style.

Typewritten-Width Measurement
Typesetter — Width Measurement

Helvetica Light
Helvetica Medium

REVIEW

1. P _____ S _____ is the method used in typesetting to assign an individual w _____ v _____ to each character.
2. The system used in a typewriter is called m _____ .-s _____ . This gives each character the same w _____ v _____ .
3. In the Quadritek, the p _____ s _____ system is based on _____ relative units.
4. The units assigned to an individual character vary according to the t _____ s _____ used.

ANSWERS:

1. Proportional Spacing, width value
2. mono spacing, width value
3. proportional spacing, 36
4. type style

Type Styles

Type Identification

There are several characteristics that are unique to various type forms and can be used to identify them. As an example, let's start with the type you are reading. It is classified as a ROMAN TYPE. This means that the characters are vertical on the page rather than slanted to one side. This characteristic makes it the *easiest* type to read and therefore, almost everything you see in print is set in roman type.

When emphasis is desired, another type form may be used. For example, type that is slanted to the right is termed ITALIC TYPE. This is generally used for emphasis within a paragraph. For emphasis within a page, type in its **BOLD** form is generally used.

As mentioned earlier, the type designer determines the width value of each character for an individual type face. When these width values are smaller than normal, the characters appear tall and thin. This form is called CONDENSED. When the width values are larger than normal the type produced is called EXTENDED.

There are many different designs of type called TYPE FACES. The type face you are reading for example is called *Century Schoolbook*. There are literally hundreds of type faces used today, for a wide variety of applications. More are being designed every day. These type designs all have common variations such as those given above. Thus, we have a *Century Schoolbook Bold,* or a *Helvetica Condensed,* etc.

If we were to take all of the upper and lower case letters with punctuation marks and numbers for a particular variation (for example, Univers Condensed) we would have a FONT. If you then took all of the fonts, representing all the possible variations of that type face, you would have a TYPE FAMILY.

HE Roman

HE Italic

HE Bold

Condensed

Extended

Bold

Bold Extended

Family of type

Avant Garde Book CONDENSED

Avant Garde DEMI BOLD

Avant Garde DEMI BOLD CONDENSED

Avant Garde X-Light

Avant Garde GOTHIC BOLD

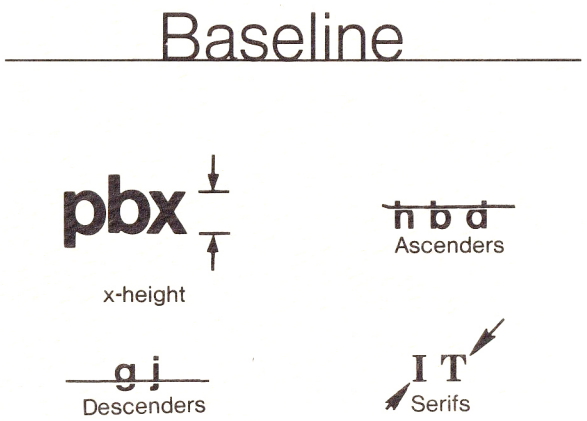
The Parts of Type

Basic Elements

The alphabet consists of 26 letters in both upper case (capitals) and lower case (small letters). Letters on paper appear to set on an imaginary line called a BASELINE.

There are 4 basic elements in the design of a letter.

- X HEIGHTS - The height of the lower case letters measured from the baseline to the top of the letters a, c, m, n, o, r, u, v, w, x, and z. The equivalent of the height of a lower case x.
- ASCENDER - The part of a letter that extends above the x height. The top of the h, b, d, f, i, k, l, and t.
- DESCENDER - The part of a letter that extends below the x height. The bottom of the g, j, p, q, and y.
- SERIF - The horizontal strokes that extend from the top or bottom of a letter. For example, the serifs on the "I" and "T" shown to the right.



Classification

There are four major classifications of type:

- SERIF
- SANS SERIF - no serifs
- SCRIPT - simulated handwriting
- ORNAMENTAL

Individual designs will fall within one of these general categories.

Serif
Sans Serif
Modern Alphabets Increa
CORNBALL

REVIEW

1. The type you are reading is a r _____ t _____
2. Type that is slanted to the right is called i _____ t _____ .
3. A heavy version of type would be called b _____ t _____ .
4. A type style having less than normal width spacing is called c _____ . One having greater than normal spacing is called e _____ .
5. All of the upper and lower case letters with punctuation marks and numbers for a particular type variation make up a f _____ .

ANSWERS

1. roman type
2. italic type
3. bold type
4. condensed
   extended
5. font

6. All of the variations of a type design make up a f_____ of t_____ .
7. Looking at typeset letters on a page, they appear to set on an imaginary b_____ .
8. The four basic elements of letter design are:

   X h_____
   a_____
   d_____
   s_____
9. Four major classifications of type are:

   s_____
   s_____
   s_____
   o_____

6. family
   type
7. baseline
8. height
   ascender
   descender
   serif
9. serif
   sans serif
   script
   ornamental

How to Measure Type

Measurement

Type is measured from the bottom of the lowest descender to the top of the highest ascender. This height is called the BODY HEIGHT of the type. Type is measured in this way so that the descenders of one line of type will not overlap the ascenders of the next line. The body height is measured in units called POINTS. Another name for the body height of type is its POINT SIZE.

Seventy-two (72) points = one (1) inch.

Point Size

Type set below 14 points is referred to as TEXT TYPE or BODY TYPE because its primary use is in "text" copy. Type set above 14 point is called DISPLAY TYPE because of its use in headlines, advertisements, etc.

Have you ever looked at a letter? There are many elements that go into the make up of a letter. All of these elements must be considered by the artist, called a type designer, when designing the letter. The first thing the type designer considers is the spacing that each letter occupies.

Text Type

Line Length

Display Type

Rule

When selecting a point size to use in setting text or body type:

- Use a point size from 9 to 12 points, depending on the line length, for maximum readability.
- The longer the line the larger the point size.

REVIEW

1. Type is measured from the bottom of the lowest d _____ to the top of the highest a _____ .
2. This height of type is called b _____ h _____ .
3. This height is also called p _____ s _____ .
4. Type is measure in p _____ .
5. There are _____ p _____ in one inch.
6. Type below 14 points is called t _____ t _____ .
7. Type above 14 points is called d _____ t _____ .

ANSWERS

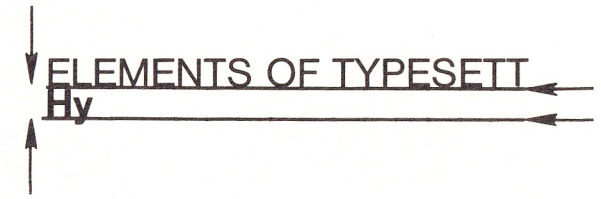
1. descender
   ascender
2. body height
3. point size
4. points
5. 72, points
6. text type
7. display type

Line Spacing (Leading)

Measurement

LINE SPACE is the space between lines of type. It is measured from the baseline of one line of type to the baseline of the line above it. Line spacing, like type size, is measured in points. In the examples at the right, type was set in 10 point. The mark-up instruction that looks like a fraction (10/10) indicates the size of the type and the line spacing. This is described as "ten on ten," indicating ten point type on ten points of line spacing. When the point size of the type and the point value of the line spacing is the same (as in the example) we say the job is SET SOLID.

10/10



Type that is set solid has no extra space between the individual lines. This allows more type to be set on a page. However the readability of the material suffers when set on a long line length.

Rule

When selecting line space, as general rules:

- A little extra line space increases copy readability.
- The longer the line being set, the more line space should be used to maintain readability between lines.
- Never use more line space than 1⅓ of the point size.

REVIEW

1. L_____ s_____ is the space between lines of type as measured from one b_____ to the b_____ of the line above it.
2. Line space is measured in p_____ .
3. If the point size of the type and the point value of the line spacing is equal, the type is said to be s_____ s_____ .
4. A little extra line space increases the r_____ of the copy.
5. The l_____ the line being set the m_____ line space should be used.
6. As a rule of thumb, never use more line space than_____ of the point size being used.

ANSWERS

1. Line space, baseline, baseline
2. points
3. set solid
4. readability
5. longer, more
6. 1½

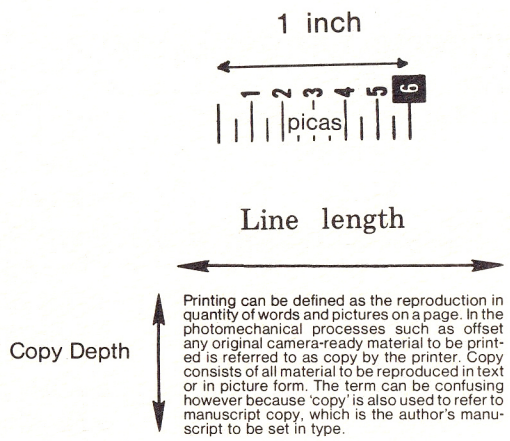
How to Measure Line Length

Measurement

LINE LENGTH in typesetting is the distance from the left margin to the right margin. Line Length is measured in PICAS and points. The pica, the second unit of measurement is equal to 12 points.

12 points = 1 pica
Six (6) picas = one (1) inch

Line length is expressed as a four digit number. The first two digits are picas and the second two are points. COPY DEPTH in typesetting is the vertical distance the copy will occupy on the page. Picas and points are also used to express copy depth because it's easier to express a measurement as 72 picas, for example, than 864 points.



Rule

A rule of thumb for determining the best line length is:

- Multiply the point size of the type used in the line by 1½ to 2. The product is an estimation of the number of picas.

For example, if the point size is 12 point, a good line length would be between 18 and 24 picas.

REVIEW

1. Line Length in type refers to the distance from the l _____ m _____ of the page to the r _____ m _____ .
2. Line Length is measured in p _____ and p _____ .
3. One pica is equal to _____ points. _____ picas equal one inch.
4. Line Length is classified with a f _____ digit number. The first two digits are p _____ and the others are p _____ .
5. A rule of thumb for line length is to make it _____ to ____ times the point size of the type used.

ANSWERS

1. left margin, right margin
2. picas, points
3. 12, 6
4. four, picas, points
5. 1 1/2
2

Basic Forms of Typesetting

Justification

JUSTIFIED COMPOSITION is the most common typesetting form seen in textbooks and newspapers. This learning program is set using justified composition. The lines of type begin at the left margin and end on the right margin. This is accomplished by expanding or reducing the space between words on a given line. When a line of type is too long to fit the line length, the intra-word spacing must be reduced. When the line of type is too short, more intra-word spacing is used. The WORD SPACES are said to be expandable. In addition to expanding word spaces, individual units of extra CHARACTER SPACING may be added between characters. The character spacing adds to the appearance of the line by reducing the size of the word spaces. This is referred to as FORCE JUSTIFYING a line.

These words would be covered with ink and contacted with paper under pressure creating a copy of the manuscript. This procedure would

JUSTIFIED COMPOSITION

WORD■SPACE■WORD■SPACE

C S **CS**

Unjustified

UNJUSTIFIED COMPOSITION is divided into three principal kinds; ragged right, ragged left, and ragged both (centered). All three forms of unjustified composition are characterized by equal word spacing within a line. This results in unjustified (ragged) margins.

Ragged Right

RAGGED RIGHT is copy that is set beginning on the left margin with the right margin ragged. Typewriter copy is an example of this.

were used the same as we use
the alphabet today to relate a message.
The evolution from the pictograph

Ragged Right

Ragged Left

RAGGED LEFT is copy that is set so that it always ends on the right margin with the left margin ragged. Setting poetry is one of the few uses of ragged left.

The type produced on the typesetter
takes up less space than that on the
typewriter. Also the appearance of

Ragged Left

Ragged Both (Centered)

RAGGED BOTH is copy which is set so that it is centered between the left and right margins, giving both margins a ragged look. Invitations are a common use of ragged both.

Have you ever looked at a letter?
There are many elements that go into the
make up of a letter. All of these

Ragged Both

REVIEW

1. The two basic forms of typesetting are:
   j _____ c _____ and u _____
   c _____ .
2. J _____ c _____ is set so that it begins on the l _____ m _____ . and ends on the r _____ m _____ .
3. A line is justified by e _____ the word spacing for lines short of the r _____ m _____ , and r _____ lines beyond the r _____ m _____ .
4. When copy is justified the w _____ s _____ are said to be e _____ .
5. Unjustified composition is divided into three principal areas:

   A. r _____ r _____

   B r _____ l _____

   C. r _____ b _____

ANSWERS

1. justified composition, unjustified composition
2. Justified composition
   left margin, right margin
3. expanding
   right margin
   reducing
   right margin
4. word spaces,
   expandable
5. ragged right
   ragged left
   ragged both

How to Prepare Copy for Typesetting

Copy Preparation

When preparing copy to be typeset there are certain basic rules that should be followed. Good COPY preparation is achieved when the original copy or manuscript:

- Is clear and easy to read – typewritten and double-spaced with all lines approximately the same length.
- Has wide margins with MARK-UP instructions in blue ink or blue pencil.
- Has numbered pages.
- Has legible corrections.
- Has indicated areas for illustrations.

The next step in good copy preparation is mark-up.

Mark-Up

MARK-UP is a term used to describe the instructions given to the typesetting operator for setting the type. These instructions, such as "close up," all caps," etc., tell the operator how the type is to be set. For this reason, they should be consistent from job to job in order to avoid confusion. Mark-up instructions should be:

- Clear and easy to understand.
- Made in the left margin with corrections within the line.
- Made with blue ink or blue pencil so they stand out and are easy to read.
- Legible.

A few mark-up symbols are used in the example to the right. For example, a square box indicates picas. At the right is copy that has been marked for a line length of twenty picas. A complete listing of symbols is given in the appendix at the end of this manual. These symbols will be used in examples and exercises throughout the remainder of the book.

20□ HE roman

10/12

f.l.

The imagination of a child is a wonderous thing. Have you ever wondered about how your child, young or adolescent, visualizes what you do at work? It would be fun to know, and in addition, your child might win a Savings Bond to help further his or her education. All you need to do to participate in this contest is to be the child of a parent who works at Itek, and draw or paint a picture of that parent at work.

rom.	Set in roman (or regular) type
ital.	Set in italic (or oblique) type
L.F.	Set in lightface type
b.f.	Set in boldface type
b.f. ital.	Set in *bold italic* type

REVIEW

1. In good copy preparation, the original manuscript should be c_____ and e_____ to read.
2. The copy should be t_____ and d_____ s_____ with all lines approximately the s_____ l_____.
3. The copy should have w_____ m_____ and have easy to read instructions in b_____ ink or p_____.
4. Pages should be n_____.
5. Corrections should be l_____.
6. Areas for i_____ should be indicated.

ANSWERS

1. clear, easy
2. typed, double spaced, same length
3. wide margins blue, pencil
4. numbered
5. legible
6. illustrations

How to Prepare Copy after Typesetting

Proofreading

PROOFREADING is the process of correcting typeset copy. When typesetting has been completed the copy is checked for correctness and the instructions for correcting the copy are given. This process may be done by the author, the typesetter, or by a PROOFREADER.

Proofreading instructions should be:

- Clear and easy to understand.
- Made in the left margin with corrections within the line.
- Made with blue ink or pencil so they stand out and are easy to read.
- Legible.
- Written on a copy. Do not write on the original.

A few proofreaders marks are used in the example to the right. A complete listing of marks is given in the appendix at the end of this manual.

w.f.//	Wrong font (size or style of type) Repeat stop mark for each additional identical error in same line
lc //	Lower case letter
lc	Set in LOWER CASE
⊥	Capital letter
caps	SET IN capitals
caps + lc	Lower case with initial caps
sm. caps	SET IN small capitals
caps + s.c.	SMALL CAPS WITH INITIAL CAPS

REVIEW

1. When using p _____ marks, they must always be c _____ and e _____ to understand.
2. The marks should appear in the l _____ m _____ and the corrections shown w _____ the line.
3. Use b _____ i _____ or p _____ so they stand out and are easy to read.
4. Symbols must be l _____ .
5. List the five characteristics of good copy preparation:

A. _____

B. _____

C. _____

D. _____

E. _____

ANSWERS

1. proofreader's clear, easy
2. left margin within
3. blue ink, pencil
4. legible
5. A. Typewritten and double spaced with all the approximately the length.
   B. The copy should have wide margins with easy to read instructions in blue ink or pencil.
   C. Pages should be
   D. Corrections should be legible
   E. Areas for illustrations should be indicated.

MODULE II

4. System Overview
5. Preparing for Operation
6. Setting Type Using the Initial Operating Values
7. How to Process Photographic Material

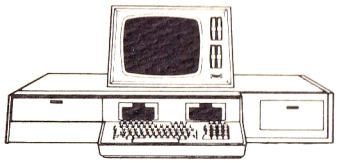
Itek

The Quadritek 1200

Operator Learning Program

MODULE II

SYSTEM OVERVIEW



Introduction

The Quadritek 1200 is a direct-input phototypesetter. It has been designed for easy operation and it has a simple keyboard. In this section you will learn the basic components of the Quadritek and the capabilities of those components.

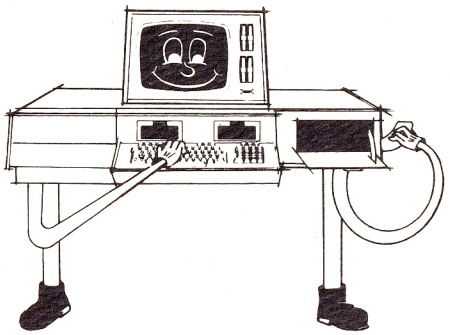
Learning Goals

At the conclusion of this section, the participant will be able to:

1. Describe the function and capabilities of the *four machine components.*
2. Recognize *fonts* (Quadrifont Type Segments from Itek) and *magnetic tape cassettes.*
3. Describe the *main and auxiliary keyboards.*
4. Describe the three major parts of the *video display terminal.*
5. Describe the function of the two *magnetic tape cassette drives.*
6. Describe the four parts of the *typesetter assembly.*

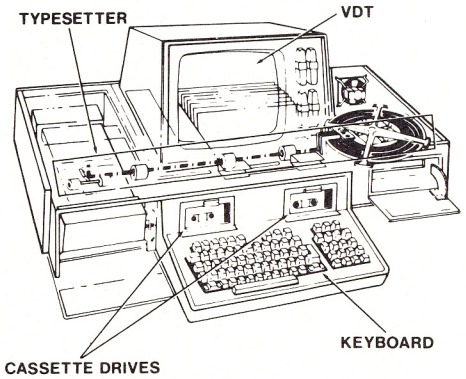
The Quadritek 1200

The Quadritek 1200 typesetter is an optical system that produces images on black and white photographic material. Operation of the machine is controlled by a person who enters instructions at a keyboard. The Quadritek then carries out these instructions with the help of its mini-computer. The computer stores information and coordinates the high speed activities of the system.



The Quadritek is a complex and advanced electro-mechancial system that applies the principles of photography. Light is flashed through a piece of clear plastic that contains pictures of all the letters of the alphabet. The plastic may be moved so that any letter can be placed in front of the light. A shadow or "image" of the letter is focused by lenses on the surface of a sheet of photographic material. As different letters are placed in front of the flashing light, words are formed on the paper. It is much like a slide projector that shows pictures on a screen. The Quadritek projects

"slides" of letters onto a "screen" made of photographic material. The "projector" is moved so that the pictures are formed across the material rather than always in the same place. The size of the pictures, the letters shown, and all the other functions of the Quadritek are ordered by the "projectionist" - -you the operator - and carried out by the mini-computer.

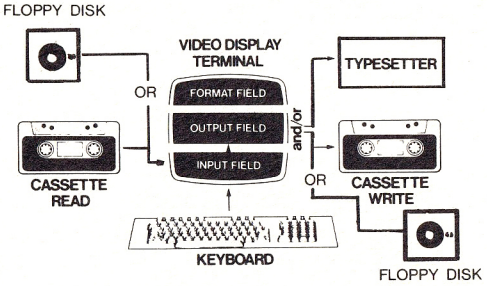


Main Sections

The Quadritek 1200 consists of four main areas:

— The *keyboard,* where the operator enters all information for typesetting.
— The *video display terminal (VDT),* that gives the operator a picture of his work.
— The *magnetic tape cassette drives or floppy disk drives* where information may be stored on a magnetic medium or retreived from it.
— The *typesetter,* where typeset copy is made.

The flow chart at the right shows the processing of keyboard and cassette information by the Quadritek.



REVIEW

1. The four main areas of the Quadritek are the k _____ , v _____ d _____ t _____ , the magnetic tape c _____ d _____ , and the t _____ .
2. Information is stored or retrieved from m _____ t _____ c _____ .
3. Information from the keyboard or a tape cassette will be viewed on the VDT and then sent to the t _____ or c _____ . The information could be sent to b _____ .

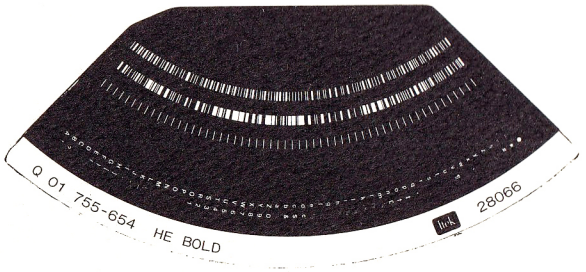
ANSWERS

1. keyboard video display terminal cassette drives, typesetter
2. magnetic tape cassette
3. typesetter, cassette both

Fonts

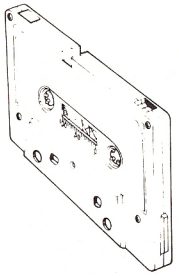
A Quadritek type segment or FONT contains all the upper and lower case letters of the alphabet, numbers, and the special

characters of a type style. The font is a piece of clear plastic that has been bonded to a photographic negative. Each font also contains coded information used by the mini-computer to set type. For perfect typesetting, the font should remain clean and free of fingerprints, dirt, and scratches. Always handle fonts by the edges or the clear plastic area along the curved side.



MAGNETIC TAPE CASSETTES

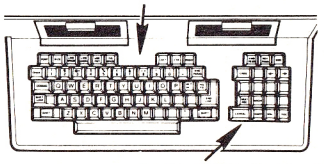
Computer typesetting information can be stored on magnetic tape and played back later. A MAGNETIC TAPE CASSETTE is a roll of magnetic tape that is enclosed in a case for easy use. Two sprocket wheels in the center of the cassette provide a way to move the roll of tape. A Floppy Disk is another device for storing data. It is much like a phonograph record, with a hole in the center to mount and turn it.



THE KEYBOARD

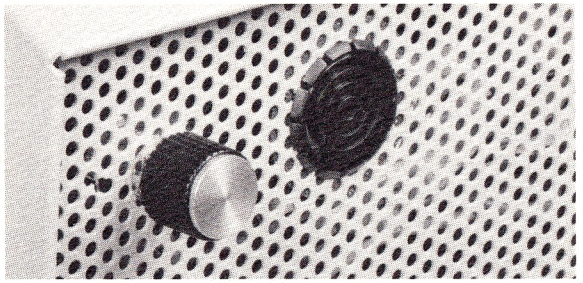
MAIN AND AUXILIARY

The keyboard of the Quadritek 1200 consists of a *main typesetting keyboard* on the left and an *auxiliary (editing) keyboard* on the right. All instructions or commands for the Quadritek are given through the keyboard. The keyboard controls the typesetter, the VDT, cassette drives, the font assembly, and the paper transport.



VOLUME CONTROL

As information is given to the Quadritek, a "beep" sounds when you are reaching the end of a line. This is similar to the bell on a typewriter. This beep will also sound when an incorrect command is entered. The volume of this beeping sound can be controlled by turning the knob on the back of the VDT. Turning the knob counterclockwise will increase the volume.



REVIEW

1. Fonts are plastic segments bonded to a photographic negative that has all the _____ case and _____ case letters, numbers, and _____ _____, of a type style. Coded information for the mini-computer is also shown on the _____. Fonts should always be handled by the _____ or the c _____ p _____ area along the curved side.

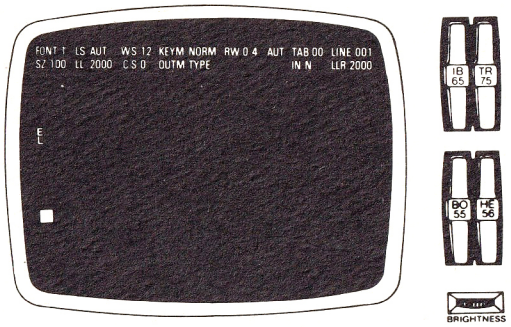
ANSWERS

1. upper, lower
special characters
font, edge
clear, plastic

2. The two main parts of the keyboard are the m_____ (t _____) keyboard and the a_____ (e_____) keyboard.

2. main (typesetter)
auxiliary (editing)

THE VIDEO DISPLAY TERMINAL (VDT)



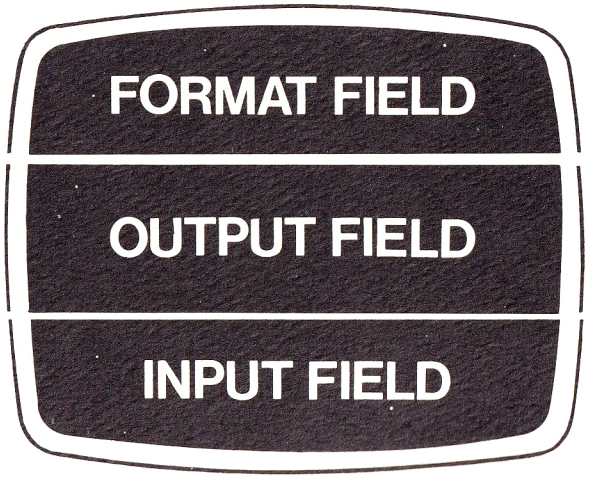
The VIDEO DISPLAY TERMINAL (VDT- is a viewing screen that is actually a small television receiver controlled by the keyboard. The VDT provides you with a "window on your work" by showing the operating conditions being used and the information being given to the Quadritek to be typeset.

BRIGHTNESS DIAL

The brightness of the VDT is adjusted by turning the brightness dial at the lower right of the front of the VDT.

VDT FIELDS

The VDT is divided into three sections called *fields*. These show three different pieces of information to the operator as a job is being typeset.



1. *Input field* - This is the bottom third of the VDT picture. Here, all information that is fed into the Quadritek is shown one line at a time. The operator can always see the line on which he is working. When information leaves the input field to be typeset or sent elsewhere, it is displayed in the output field.
2. *Output field* - This is the middle section of the screen. This field displays the last line of information sent out to the typesetter or other device (cassette tape, etc). The operator can always see the line he/she is working on (in the input field). At the same time the output field shows the last line he/she completed work on and sent for typesetting or other use.
3. *Format field* - This is the top section of the screen. Here the operating conditions are displayed. These are the

operating PARAMETERS. These parameters include the size type being set, the line length being typeset, etc., and are always on view for reference. Special messages from the Quadritek to the operator are also displayed in the format field, in the third line from the top. For example, when the supply of photographic material in the Quadritek runs out the message "out of film" will be displayed.

CHARACTER DISPLAY

The VDT displays a maximum of 64 characters per line, in 4 lines for a total of 256 characters. All characters on the VDT equal 18 point, no matter what point size is being typeset. For this reason it may take more than one VDT line to display what will be one typeset line. Both the input and output fields have four lines available to handle long lines of type.

REVIEW

1. The VDT is divided into three parts. These are the i_____ f_____, the o_____ f_____, f_____ f_____.
2. The top two lines of the VDT are used to display the p_____ for the job being set.
3. The third line of the format field may display s_____ m_____ from the Quadritek to the operator.
4. The VDT displays a maximum of _____ characters per line in 1the input field and the same in the output field.
5. For this reason _____ lines are available in each field for long lines of type.
6. As type is input, b_____ occurs when you are reaching the e_____ of a l_____ or when you have entered an i_____ c_____.

ANSWERS

1. input field output field, format field
2. parameters
3. special messages
4. 64
5. 4
6. beep end, line, incorrect command

MAGNETIC TAPE CASSETTE DRIVES

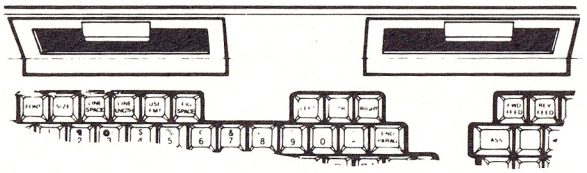
Magnetic tape cassettes are used to record and store information from the Quadritek and to give information to the system. The *magnetic tape cassette drives* move the tape and record (write) on it or read information from it. The tape drive stations are located above the keyboard.

THE READ STATION

The left-hand cassette drive is used for *retrieving* (reading) information already recorded on tape.

THE WRITE STATION

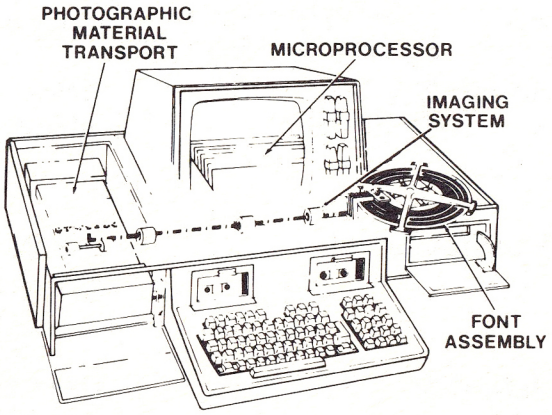
The right-hand cassette drive is used to *record* information. This gives a permanent record of work so that editing and repetitive jobs can be handled easily and quickly.



THE TYPESETTER

The Quadritek contains a mini-computer that directs the method by which type is set, based on the operator's instructions. The main elements of the typesetter include the *font assembly,* the *material transport,* the *imaging system,* and *mini-computer.*

1. The Font Assembly – holds *four* fonts at a time.
2. Photographic Material Transport moves the material back and forth for phototypesetting.
3. The Imaging System – a series of lenses and mirrors that controls the *size* and *focus* of the image on the photogrpahic material.
4. The Mini-Computer – consists of a series of printed circuits that store the Quadritek operating program and use this information to tell the typesetter what to do. Caution - As a part of routine operation the font assembly and material transport will be opened by the operator. *Do not* attempt to gain access to the imaging system or mini-computer. These components are aligned for trouble free, quality operation. They should only be adjusted by an Itek serviceman.



REVIEW

1. There are _____ magnetic cassette drives in the Quadritek.
2. The l _____ station is for r _____ tapes.
3. The r _____ station is for w _____ tapes.

ANSWERS

1. 2
2. left, reading
3. right, writing

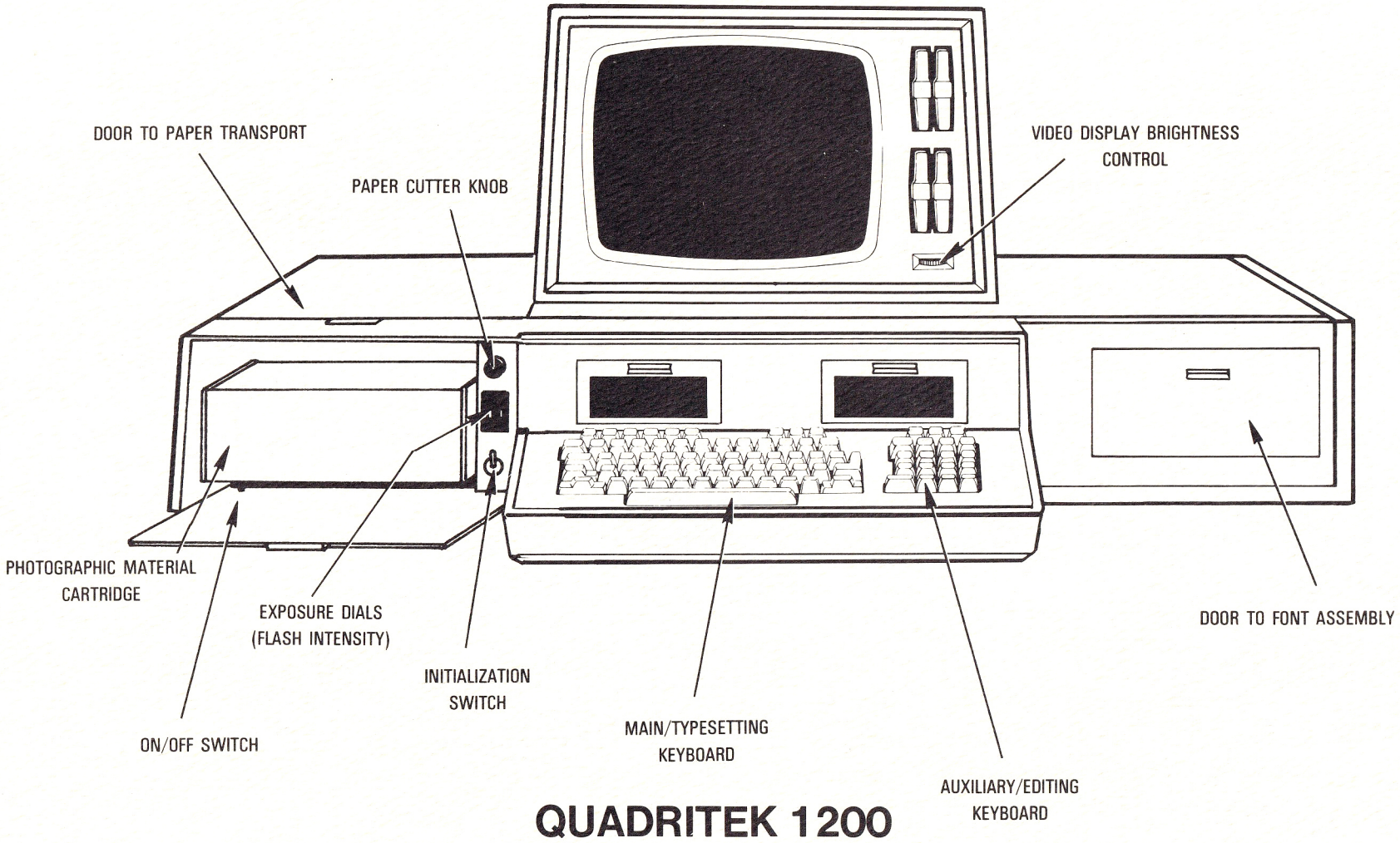
SECTION REVIEW

1. The four main components of the Quadritek are the:

   k _____ , v _____ d _____ t _____ ,
   m _____ t _____ c _____ d _____ and the
   t _____ .
2. The three major parts of the VDT are the f _____
   f _____ , the i _____ f _____ , and the o _____
   f _____ .
3. There are two cassette drives; the left or r _____ head
   and the right or w _____ head.
4. The two parts of the typesetter that the operator should *not* attempt to open are the m _____ c _____ and the
   i _____ s _____ .

ANSWERS

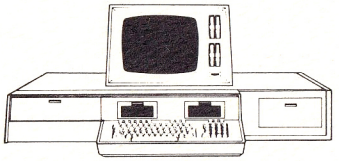
1. keyboard, video display terminal, magnetic tape cassette drive typesetter
2. format field input field, output field
3. read write
4. mini-computer imaging system



QUADRITEK 1200

As you read this section refer back to this page. The illustration will help you locate major Quadritek components.

PREPARING FOR OPERATION



LEARNING GOALS

At the conclusion of this section you will be able to:

1. Describe the *environmental requirements* of the Quadritek.
2. Turn the Quadritek *on*.
3. Load the *operating program* cassette tape.
4. Load the *fonts*.
5. Load *photographic material*.

THE ACTION/FEEDBACK

In this section you will begin operating the Quadritek 1200 Phototypesetting System and will be introduced to the *Action/Feedback* portions of the learning program.

In the Action/Feedback you will find that:

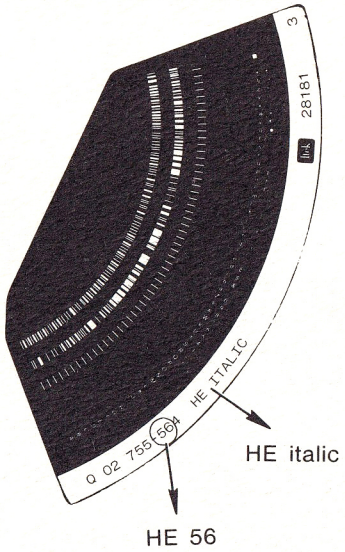
1. *Instructions* to take an *action* are in bold type.
2. *Feedback* will follow. This helps you confirm that the action was correctly taken.

Note: For your typesetting work to match the examples shown in this book, the following fonts should be used.

Position 1 HE 55 (HE roman) Position 2 HE 56 (HE italic)
Position 3 HE 65 (HE bold) Position 4 Any font

The font syle can be found on the outer edge of the font. See the example to the right.

If other fonts are used, your results may vary from the examples.



Many of the type styles produced for the Quadritek System are original Itek designs. Others are produced under license agreements, or designed in 'similar to' styles. All Quadrifont type styles are identified by a two letter code for the family name, and two digits pertaining to weight and style.

Serif		San Serif		Decorative	
BK	Baskerville				
BM	ITC Bookman	AG	ITC Avant Garde	BL	Balloon
BO	Bodoni	ES	Eurostyle	FS	Formal Script
CP	Cooper Black	FU	Futura	PA	Park Avenue
CR	Corona	HE	Helvetica	PM	Paul Mark
CS	Century Schoolbook	ID	Itek Directory		
EX	Excelsior	OP	Optima		
GD	Garamond	UN	Univers		
IB	Itek Bookface				
ME	Melior				
NT	ITC Newtext				
PL	Plantin				
RG	Regal				
ST	Stymie				
SV	ITC Souvenir				
TR	Times Roman				
ZF	ITC Zapf Book				

The two digit designations determining weight and style are as follows—

the first number following the family mnemonic defines the weight;

4 = Light
5 = Medium
6 = Bold/Semi Bold
7 = Extra Bold/Bold
8 = Ultra Bold

the second number defines the style and width;

0 = Pi Font
1 = Pi Font Small Caps
3 = Extended
5 = Roman
6 = Italic
7 = Condensed Roman
8 = Condensed Italic
9 = Extra Condensed Roman

For example: IB 56 would represent Itek Bookface Medium Italic.

INTRODUCTION

In this section we will discuss the steps needed to prepare your Quadritek for typesetting. These steps should be taken each day, as you get ready to use the system.

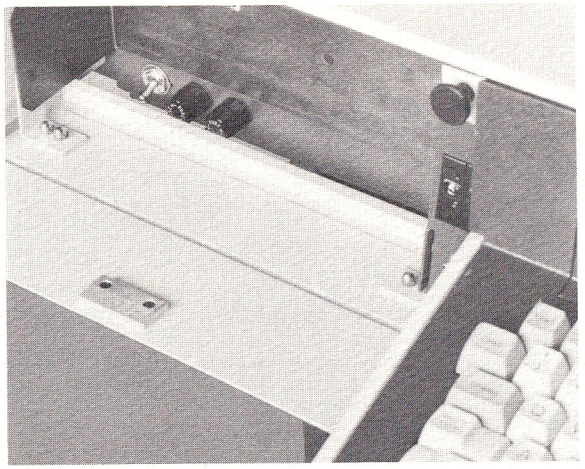
PHYSICAL CONDITIONS

Environmental factors will affect the operation of the Quadritek 1200. These physical conditions should be checked at installation or when a unit is moved to a new location.

POWER REQUIREMENT

Power Requirement - 115 V, 15 amp dedicated line. (A power line having no other machine, lights, etc. operating from it.)
Temperature - 60° F to 90° F. The Quadritek heat output is 2700 BTU per hour.
Warm Up Time - 5 minutes or less.

HOW TO TURN THE POWER ON



Action 1

Reach behind the left side of the panel and locate the ON/OFF toggle switch.

Action 2

Move the switch to the left.

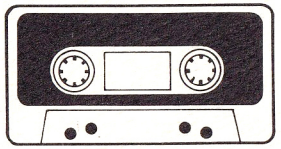
Feedback

If the unit fails to come on, make sure that the machine is plugged in. If it is plugged in and still doesn't come on, call Itek Service.

When the Quadritek is ready for operation the VDT will show lines of flashing hyphens.

HOW TO LOAD THE OPERATING PROGRAM (TOS)

TOS TAPE



The *Typesetter Operating Software* program (TOS) is a set of instructions that, when loaded into the Quadritek 1200, tell it how to set type. The program is stored on a magnetic tape cassette for easy handling. When a Quadritek is manufactured, individual measurements are made to match the lenses of the imaging system to the operating characteristics of the unit. These special variations are recorded on the TOS tape. Two copies of the tape are sent with the machine when it is shipped. One of these is for daily use and one should be stored as a spare. Additional copies of TOS can be made using the copying procedures explained in the section called *Using Magnetic Tape Cassettes*. Each TOS tape was designed to insure the best focus and accuracy of *only one* machine. The TOS tape serial number (recorded in the line marked *job no.)* matches the serial number marked on the rear of the Quadritek.

HOW TO LOAD TOS

Everytime the Quadritek 1200 is turned on the TOS tape *must* be loaded. ★ ★ ★

Floppy Disk

If your Quadritek is equipped with floppy disk units, only, proceed to the floppy disk section near the end of this learning program. Complete "Part I. Floppy Disk Basics." Then return to this section and begin with "How to Load Fonts."

Cassettes

If your Quadritek is equipped with cassette drives only, or cassette and floppy disk drives, continue with this section.

★ ★ ★

Action 1 **Remove the TOS tape from its protective plastic case.**

Feedback Side A should be marked *"TOS"* in the title space.

Action 2 **Hold the cassette with the exposed tape down and Side B, with red warning message** *"Do not record data on this side,"* **facing away from you.**

Action 3 **Open the door to the Read Station (left-hand door).**

Action 4 **Insert the bottom of the cassette into the two metal clips at the bottom of the tape drive.**

Action 5 **Push in on the front of the cassette, with your thumb, near the top, until the cassette snaps into place.**

Feedback Do not force the cassette. If the posts in the center of the cassette drive do not line up exactly with the sprocket wheels in the center of the cassette (the two holes in the cassette with small toothlike projections) it may be difficult to push in the cassette. If the cassette does not go in easily, remove it (refer to "How to Remove the TOS Cassette", in this section) and try again to load it.

Action 6 **Close the door to the read station.**

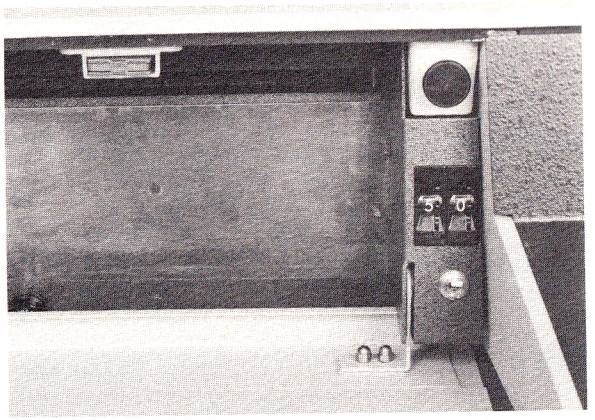
HOW TO LOAD THE PROGRAM

Action 1

Open the door at the left of the keyboard by pulling outward.

Feedback

You will see, at the right, a black knob, dials with numbers on them, and a toggle switch. This switch is the loading or *initialization switch* which will bring the operating program to its initial condition.



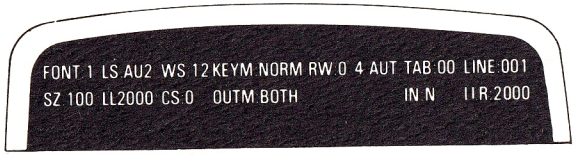
Action 2

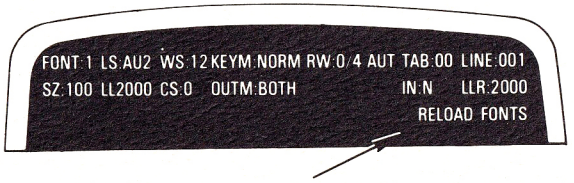
Depress the initialization switch.

Feedback

When you press the switch:

1. The VDT picture will disappear.
2. The cassette drive will start to move the TOS tape forward.
3. Then the TOS tape will rewind automatically.
4. Buzzing sounds will be heard coming from the typesetter as it is aligned in starting position.
5. After about 90 seconds the VDT will come on. If the Quadritek contains fonts the format, output, and input fields will be displayed. If no fonts are in the machine only the format field will appear and the message *"Reload Fonts"* will appear on the third line of the format field. When either of these displays appears the *Typesetter Operating Software* program is loaded.





IF THE PROGRAM DID NOT LOAD

If the VDT display does not appear or does not show the proper fields:

1. Insure that the TOS cassette, and not some other tape, was loaded.
2. Insure that the TOS tape was loaded in the read station, at the left.
3. Insure that the red warning message on the TOS tape is facing in, toward the machine.
4. Insure that the cassette drive sprockets have completely engaged the holes in the cassette, and the cassette is all the way in the machine.

RE-INITIALIZING TOS

After TOS has been loaded and the TOS cassette removed, the Quadritek can be told to "check" the program. This is called RE-INITIALIZATION. The program is re-initialized when an error message appears in the top portion of the VDT or at any time the operator decides it is necessary. When TOS is re-initialized, the Quadritek will be returned to its initial operating conditions. (The next section contains a detailed explanation of these values).

To re-initialize TOS:

1. Press the cassette key (CASS).
   The VDT display will disappear and then re-appear about 25 seconds later.
2. If the proper display does not appear,re-load the TOS cassette and press the initialization switch.

If the message "ERROR 080" is displayed.

1. Load the TOS tape.
2. Press the initialization switch.

HOW TO REMOVE THE TOS CASSETTE

Action 1 — **Open the Read Station Door.**

Feedback — You will see a black button to the upper right of the cassette. This is the *cassette ejection button.*

Action 2 — **Push the black ejection button.**

Feedback — The top of the cassette will come loose.

Action 3 — **Remove the TOS tape and replace it in its protective case. Store the tape in a safe place.**

Action 4 — **Close the read station door.**

How to Load Photographic Material

Typesetting paper for the Quadritek 1200 is available in both stabilization (S type) and resin coated (RC type) forms. Both kinds come in a light-proof, disposable box. This paper is loaded into the **material transport area** at the left of the machine.

Action 1 — **Open the door of the material transport area by lifting it up.** It will rest in an upright position. You will see the **transport pressure plate, pressue bearings,** and **out-of-film switch.**

Action 2 — **Remove the transport pressure plate by holding the two metal blocks at each end of the rubber rollers and pushing toward the rear of the Quadritek.**

Feedback — The cut-out edges of the pressure plate will come out from under the two silver pressure bearings at the sides of the compartment.

Action 3 — **Lift the transport pressure plate from the machine and lay it on a flat surface.** Do not place it on the top of the VDT. It could roll off and be damaged.

Feedback — Removing the pressure plate will reveal two metal bars in slots in the bottom of the transport. These are the *margin guides* for the paper.

Action 4 **Look for any paper scraps in the transport area and remove them.**

Action 5 **Open the front, left-hand panel of the Quadritek.** This is the panel you open to reach the initialization switch.

Feedback You will see a long black box. This is the *material cartridge*, a light-proof container that receives the typeset material for chemical processing.

Action 6 **Remove the material cartridge. Grip it on the top and bottom and pull straight out.** The cartridge is fastened magnetically.

Action 7 **Look in the material cartridge compartment and remove any paper scraps.**

Action 8 **Remove the black tape from a box of** *Itek photographic material* **and gently pull about 10 inches of material out of the box.**

Action 9 **Place the box in the rear of the material transport, with the paper pointing forward.**

Feedback The pink emulsion side of the paper should be facing down.

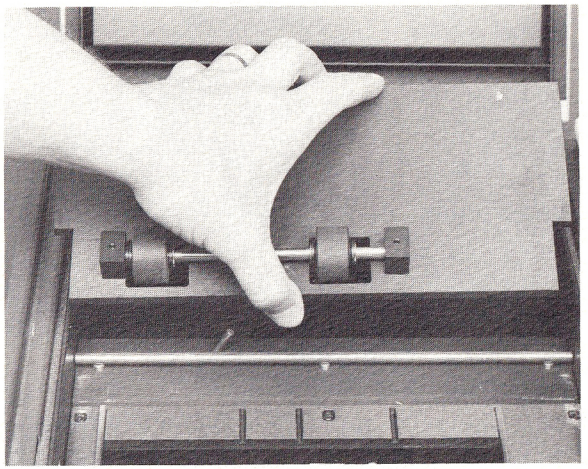
Action 10 **Position the right-hand margin guide (long, narrow, metal bar) in the slot matching the width of the paper.** The left-hand margin guide should never be moved.

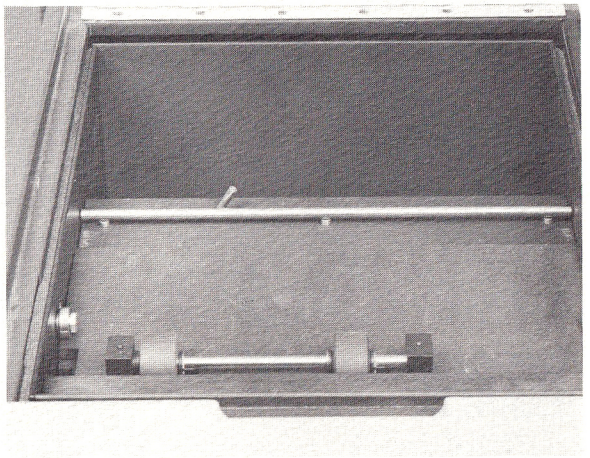
Action 11 At the left of the transport, in front of the box of photographic material, is the bar of the *Out-of-Film switch.* **Move the bar to the left and hold it there.**

Action 12 **Put the photographic paper flat on the transport, between the margin guides.**

Action 13 **Release the out-of-film switch.**

Feedback It should rest on the left edge of the paper.





Action 14 **Gently pull the paper toward the front of the machine and guide it through the slotted opening (throat).**

Feedback Pull the paper through the throat until it lies flat on the transport, between the margin guides, and the paper starts to appear in the area where the material cartridge was removed.

Action 15 **Replace the pressure plate.** The yellow stripes should face down.

Action 16 **Draw a line across the photographic material where it leaves the supply box.**

Action 17 **Close the transport door on the top of the machine.**

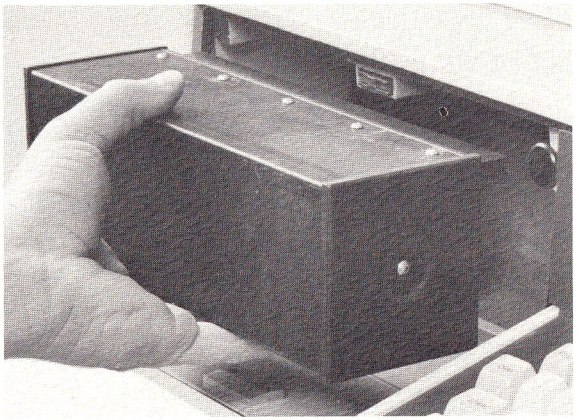
Action 18 **Press the forward feed key (FWD FEED), holding it until the line you drew on the photographic material becomes visible.** The FWD FEED key is at the top of the auxiliary (editing) keyboard.

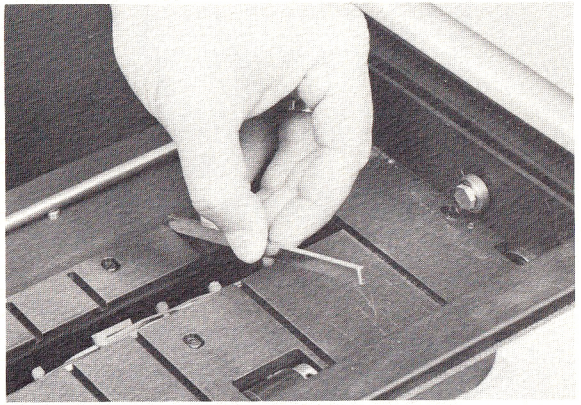
Feedback The paper will feed slowly and the line will appear in about 30 seconds.

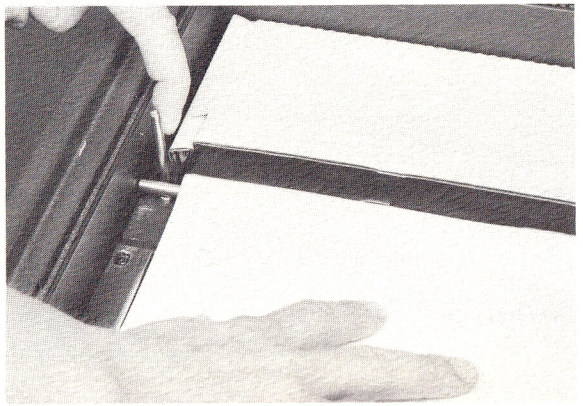
Action 19 **Pull the paper cutter knob and guide it back.** This is the black knob in the material cartridge compartment, above the initialization switch and exposure dials. Never let the paper cutter snap back.

Action 20 **Replace the material cartridge.** Insure that it is completely and firmly fastened.

Feedback If a material jam should occur in either the transport area or the material cartridge, follow the directions in the *Preventative Maintenance Section.*

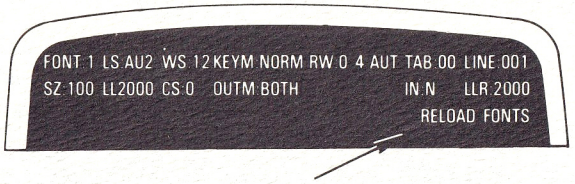






HOW TO LOAD FONTS

The Quadritek 1200 holds four fonts of type at a time. Each font is a complete type style, containing 112 characters as well as width information for each character and the computer reference marks needed to set type. The fonts are mounted on a spindle that has four arms that make it resemble a spider. The *"spider"* is located behind the font loading door, to the right of the keyboard.

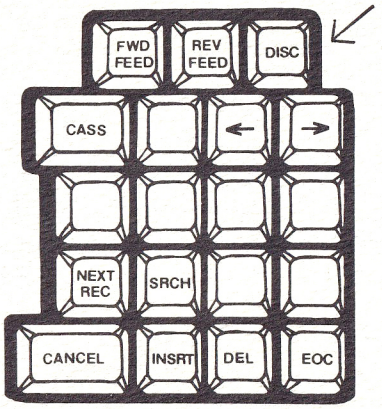


No Fonts in Machine

After loading TOS, if your machine contains no fonts, or less than the required four, the message "RELOAD FONTS" will be displayed in the format field. Beginning with Action 3, follow the directions below. Skip Actions 1 and 2.

Fonts in Machine

After loading TOS, if your Quadritek already contains four fonts, no message will appear in the format field. Follow the directions below, beginning with Action 1.

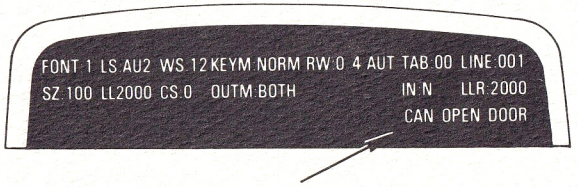


Action 1

Select the four fonts to be loaded into the typesetter.

Action 2

Press the DISC button at the upper right of the auxiliary (editing) keyboard. The spider spins during operation and the font loading door is locked to prevent accidental access. The DISC button starts and stops the spinning motion and unlocks and locks the font loading door.



Feedback

The message *"CAN OPEN DOOR"* will appear on the third line of the VDT format field.

Action 3

Open the font loading door. Pull outward.

Feedback

You will see at least one arm of the spider, with numbers on its end.

Action 4

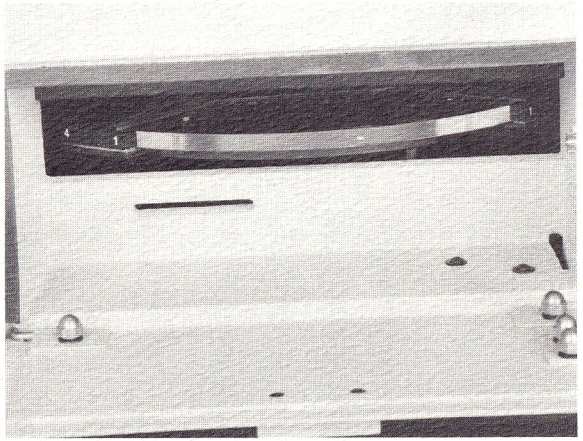
Rotate the spider clockwise (left) until the two arms with the number 1 appear at the left and right of the opening.

Action 5

If you are loading fonts, **open the protective case of the font to be loaded in position one.** If you are replacing fonts, **also open the case of the font that is being replaced.**

Feedback

Note the clear area along the curved edge of the font. It is important to always handle the fonts carefully and only by this clear area. (See the *Preventive Maintenance Section* for the care and cleaning of the fonts.)



Action 6

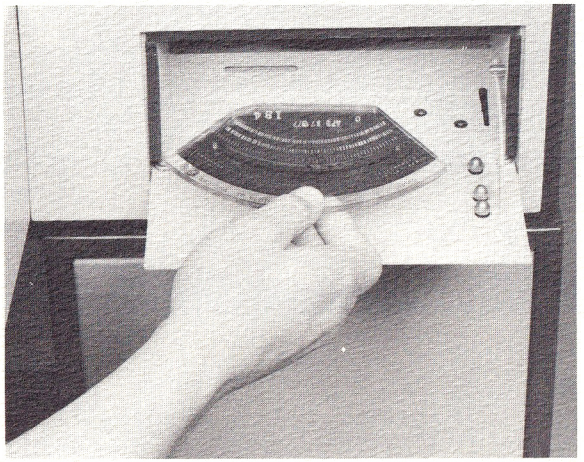
If you are replacing a font, **reach into the machine and remove it. Replace it in its case.** Hold it on the outer, clear part and lift up about a half an inch, until the edge of the font is clear of the ends of the spider. Now, pull outward lightly. If you are loading a font, read the following Feedback and go to Action 7.

Feedback

At this point you should have the font door open and the spider turned to position one. The case of the font to be placed in that position should be open.

Action 7

Remove the font from its case, holding it by the clear edge.



Feedback

The font should be held so that you can read the numbers and letters along the edge.

Action 8

Place the outer edge of the font (straight edge) on the resting plate between the spider arms.

Action 9

Lift the outer edge of the font slightly (about 3/4 inch) and slide the font forward until it stops.

Action 10

Move the outer edge of the font down, until both corners lock behind the ends of the spider arms.

Action 11

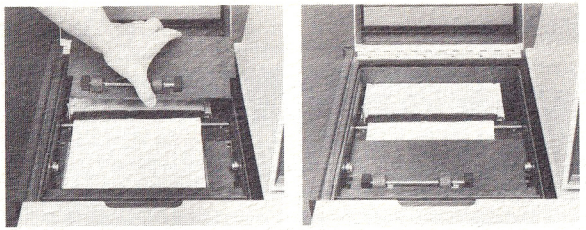
Close the font case and insert it in storage slot number one. The ends of font cases may be tagged witht he type style so that when placed in the storage slots the operator will have a reminder of what type styles are in each spider position.

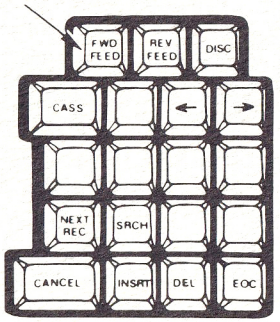
Action 12 — **Repeat Actions 7 - 11 for font positions 2, 3 and 4.**

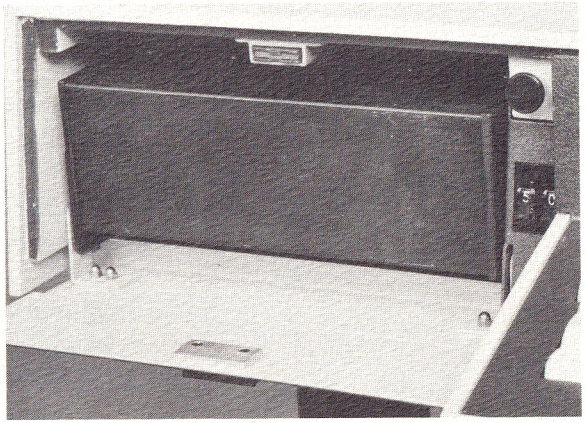
Action 13 — **Close the font loading door.**

Action 14 — **Press the DISC button.**

Feedback — If four fonts were loaded, the width values for each font are read into the mini-computer. If the Quadritek was able to read the widths of all four fonts the message **"Widths O.K."** will appear on the VDT. (This message will not appear if you began at Action 3.) This means the typesetter has been programmed to match the requirements of the type styles being used.
The **"Reload Fonts"** message will appear if less than four fonts were loaded. A **"Font 1 BAD"** (or Font 2, 3, or 4 BAD) message will appear if the machine could not read the widths of a particular font. If this happens return to Action 2. Remove the font and clean it, according to the instructions in the *Preventative Maintenance Section,* before reloading it.



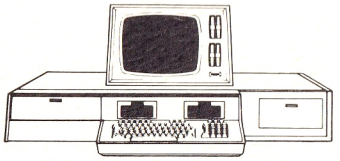




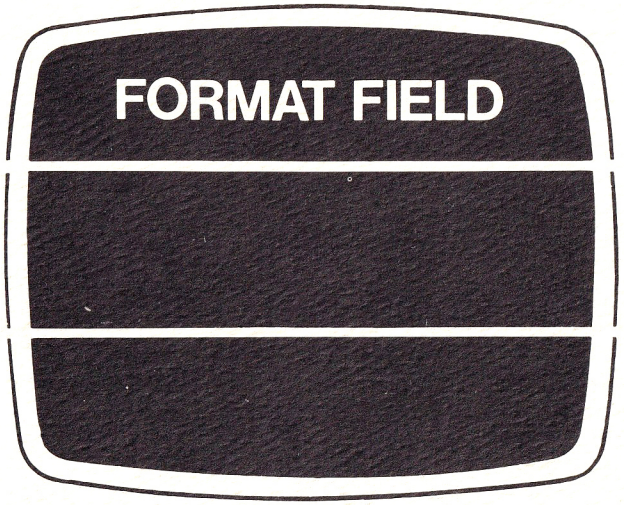
How to Load Fonts Before TOS Is Loaded

When the Quadritek is on but the TOS program hasn't been loaded the loading door can be opened without pressing the DISC key. You may load all fonts and initialize. The **"Width O.K."** message will not appear.

SETTING TYPE USING THE INITIAL OPERATING VALUES



Introduction



The Quadritek 1200 TOS program is designed to display a set of typesetting values when it is loaded. The values appear in the upper portion of the VDT - the format field. These are the *initial operating values.* In this section the parts of the format field, and the initial operating values will be explained. You will also keyboard information and typeset.

Learning Goals

At the completion of this section you will be able to:

1. List the *initial operating values.*
2. Describe the types of *keyboard commands.*
3. Choose the *output mode.*
4. *Keyboard information,* using the initial operating values.
5. Use the *four editing procedures* to correct the information you keyboard.
6. Use the five *end-of-line commands* to typeset information that has been keyboarded and edited.

Quadritek Capabilities

When TOS has been loaded the Quadritek is prepared to set 10 point type on a 20 pica line, using font number one. A number of other initial operating value have been selected and are listed in the format field. All of these values can be changed by the operator to match the requirements of the job he wishes to typeset. The table below lists all of the possible entries for each section of the format field. For each part of the field the initial operating value is listed, the purpose is briefly explained, and the range of possible settings is noted.

Action 1

Read the table and locate each initial operating value on your Quadritek VDT.

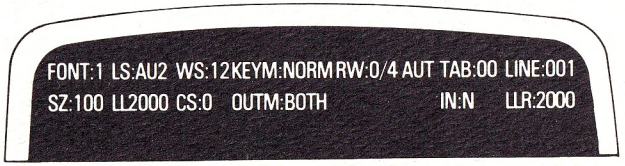
Format Field	Initial Operating Values	Purpose	Capability
FONT:	1	Indicates what font position is now in use.	1–4font positions
SZ:	100	Indicates what size of type is now in use.	055–360 5½–36 points
LS:	AU2	Indicates what line space (in points) is now in use.	0–99.9 points
LL:	2000	Indicates what line length (in picas & points) is now in use.	0001–4802
WS:	12	Indicates what space between words (in relative units) is now in use.	0–99 units
CS:	0	Indicates what space between characters (in relative units) is now in use.	0–9 units
KEYM:	NORM	Indicates the keyboard mode being used.	NORM, EDIT, INSRT
OUTM:	BOTH	Indicates what output mode is in use.	TYPE, CASS (OR DISK) BOTH, NONE
RW:	0/4	Indicates what white space reduction (in ¼ relative units) is now in use.	0/4–9/4 in ¼ relative units
AUT	AUT	Indicates the line ending mode being used.	AUT or MAN
TAB:	00	Indicates what tab is in use.	01–20
IN:	N	Indicates what indent is in use.	None, 4 Left 1 Right , Combination Left & Right
LINE:	001	Indicates what line is in use.	001–999
LLR:	2000	Indicates the Line Length Remaining (in picas & points) as you keyboard.	0000–4802

The following zones do not appear as initial operating values. They will be displayed in the format field when selected by the operator. The exact purpose of each part of the format field will be explained as you proceed in this learning program.

Format Field	Initial Operating Values	Purpose	Capability
EW:	RW:	Indicates what extra white space (in ¼ relative units) is being used.	Replaces RW – 0/4–9/4 in ¼ relative units
SFM	Blank	Indicates the Store Format mode is being used.	99 formats – 510 keystrokes maximum
RR	Blank	Indicates Ragged Right mode is being used.	
RB	Blank	Indicates Ragged Both mode is being used.	
RL	Blank	Indicates Ragged Left mode is being used.	
XF	Blank	Indicates Cancel Flash mode is being used.	

Action 2

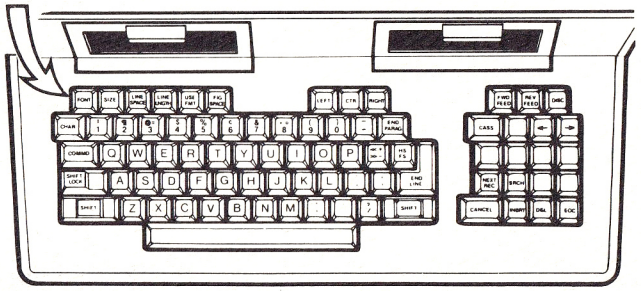
Locate the blank area in the right half of the second line of the format field. This is where the values listed above will appear when they are selected.



Disc Units Only

NOTE: Quadriteks equipped with floppy disk units will also display a third format field line. The purpose of the zones in this line will be explained when you reach the floppy disk section of this learning program.

Keyboard Commands



Commands issued from the keyboard are in these two forms:

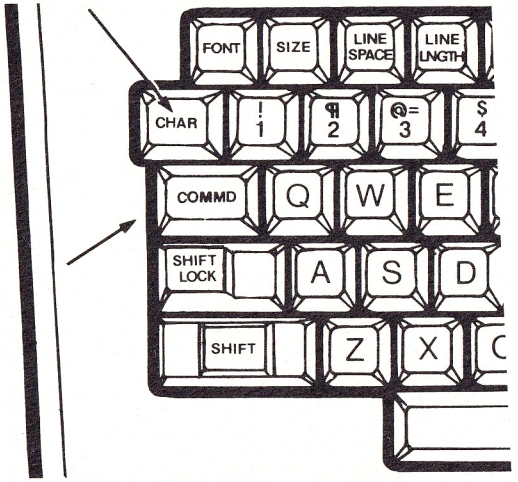
- Single key commands - these use the named keys; the FONT, SIZE, LINE SPACE, LINE LENGTH, etc.
- Mnemonic commands - these use a named key plus two or three alphabetic keys.

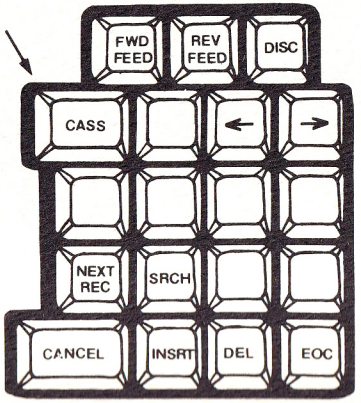
Mnemonics

The word MNEMONIC (pronounced nemonic) simply means "an aid to the memory." The Quadritek has been designed to eliminate the need for named keys for every single command. Instead of searching through rows of named keys for the command you want, you use the alphabet keys and enter the initials of the command. These initials are the mnemonic code. For example, the mnemonic in the command to set a ragged left margin is *"rl"*.

Before entry of the mnemonic, one of three named keys must be pressed. This signals the Quadritek that the alphabet keys being used are a mnemonic code and part of a command, rather than just letters of a word being typed. The three keys are:

- Command key (COMMD) - used for most commands.
- Character key (CHAR) - used to typeset special characters that are on the fonts but for which there are no keys on the keyboard.
- Cassette key (CASS) - used to control the magnetic tape cassette (or floppy disk) drives, output mode selection, and search string definitions. On Quadriteks equipped with floppy disk units the key is marked "FLOPPY DISK" instead of "CASS."





Here are examples of these three types of mnemonic commands:

The command that tells the Quadritek to set a ragged left margin uses:

– The command key followed by
– The alphabet keys *"r"* and *"l"* (the mnemonic for ragged left.)

This command is written ⌘rl

Action 3

Locate the command key and type the command to set ragged left composition.

⌘rl

Feedback

The command to typeset the special "star" character (★) uses:

– The character key, followed by . . .
– The mnemonic "st" for star.

This command is written ⌘st

Action 4

Locate the character key and type the mnemonic command to typeset a star.

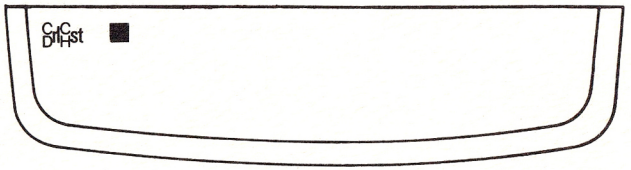
⌘st

Feedback

The command to a cassette tape to rewind uses . . .

– the cassette key, followed by
– the mnemonic "cr" for "cassette rewind"–"⌘cr"

These commands, if typed on the Quadritek keyboard appear on the lower portion of the video display terminal, as shown at the right.



Action 5

Look at the VDT and familiarize yourself with how these types of commands are displayed.

How to Choose the Output Mode

WHY

Because the Quadritek 1200 can take information and send it to the typesetter, to be recorded on a magnetic tape cassette, or can both typeset and record it at the same time the operator must choose the output mode before keyboarding of information begins.

WHAT

The output modes are:

1. OUTM:BOTH (Output Mode: Both) - The initial operating mode, when TOS is loaded. Information will be recorded on a magnetic tape cassette (or a floppy disc) and typeset at the same time.
2. OUTM:TYPE - Information is typeset, only.
3. OUTM:CASS - Information is recorded on a magnetic tape cassette, only. (This zone will read "DISK" on units equipped with floppy disk units. Information is recorded on disk only).
4. OUTM:NONE - Information is displayed on the VDT, only.

WHERE

- Beginning of Line - Output mode selection is a *"beginning of line"* function and must be given before any other information on a line.
- Cancellation - The output mode remains in effect until a new output mode is selected, an end-of-job command is give, or TOS is re-loaded.

HOW

To select an output mode:

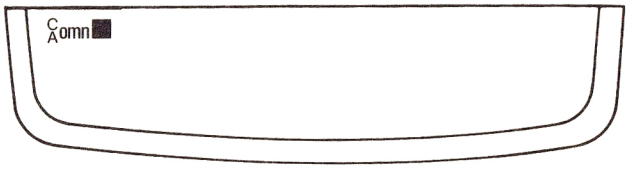
1. Press the cassette key (CASS)
2. Keyboard the output mode mnemonic;

   a. omb - output mode, both
   b. omt - output mode, type
   c. omc - output mode, cassette
   d. omn - output mode, none

Action 6

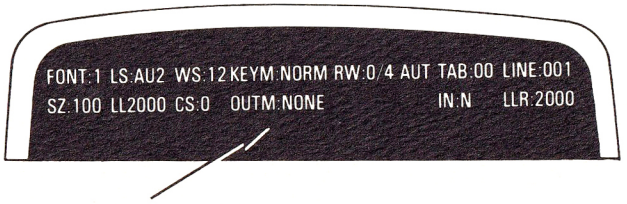
Locate the cancel key and press it twice. Press the Cassette key (CASS) and keyboard the mnemonic "omn."

CANCEL
CANCEL
CASS omn



Feedback

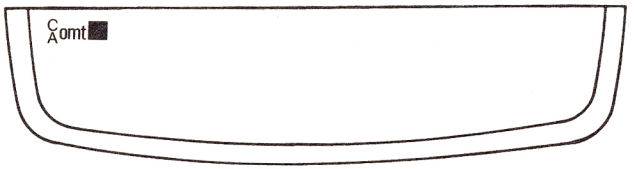
The output mode (OUTM), in the format field, changed from BOTH to NONE. As you completed the command by pressing the letter *"n"*, the message left the input field but did not go to the output field because it was not information to be used by the typesetter.



Action 7

You wish to see your finished work so the typesetter must be selected as the output device. **Press the CASS key and the keys for "output mode typesetter".**

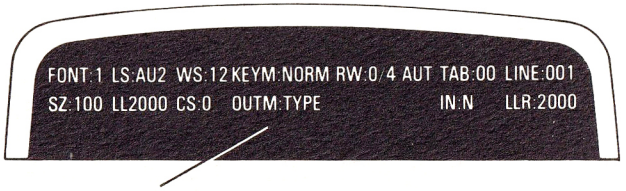
CASS omt



Feedback

Verify that OUTM changed from NONE to TYPE

NOTE: This learning program will take several days to complete. Every day, when TOS is loaded, you will have to set the output mode. Mark this section so that you can refer to it in the future. If an output mode is not specified in the following sections, use output mode TYPE, or place a cassette in the right-hand station and use the initial output mode, BOTH. Disk units should use output mode TYPE.



SUMMARY OF OUTPUT MODES	
Mode	**Keystrokes**
BOTH* (cassette & typesetter)	ÇAomb
TYPE	ÇAomt
CASSETTE*	ÇAomc
NONE	ÇAomn

*Used in slightly different form by Quadriteks with floppy disk units: These will be explained in the floppy disk section.

REVIEW

1. When the TOS program is loaded the VDT format field will display the i _____ o _____ v _____ .
2. When the TOS program is first loaded, the Quadritek is ready to use font number _____ , to set _____ point type on a line _____ picas long.
3. The initial operating output mode is b _____ . The Quadritek is prepared to _____ plus record on a c _____ or d _____ .
4. The two types of commands entered at the keyboard are s _____ k _____ commands and m _____ commands.
5. When giving a mnemonic command you precede the mnemonic with one of three keys. These are the _____ key, the _____ key, and the _____ .
6. To change the output mode, the operator must enter the command at the _____ of the l _____ .
7. The command to only typeset information is _____ .

In this section the Action/Feedback will include the use of the Quadritek keyboards. You will find that:

1. *Instructions* to take an action are in *bold type.*
2. *Keys to be pressed* are noted immediately below the instructions.
3. The *correct VDT picture,* to match the action, is shown at the right.
4. *Feedback* will follow actions. This helps you confirm that the action was taken correctly.

Your typeset work will match the examples shown in the learning program if you use the fonts listed in Section 5, in the positions indicated. Results will vary in appearance if other fonts are used. Keyboard operations remain the same for all fonts.

ANSWERS

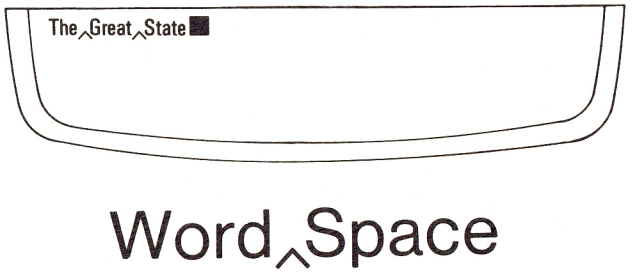
1. initial operating value
2. 1, 10
   20
3. both
   typeset
   cassette, disk
4. single key, mnemonic
5. command
   cassette, character key
6. beginning line
7. Form

HOW TO KEYBOARD INFORMATION

Action 1

Insure that output mode is TYPE and keyboard the following. If you make a typographical mistake don't try to correct it at this time.

The Great State



Feedback

Verify that the following changes took place in the VDT input field.

1. The line was displayed with small wedge-shaped marks between each word. These wedges are marks for word spaces, where you pressed the keyboard space bar.
2. The cursor (the square symbol) moved across the screen, staying to the right of the last character keyboarded. The cursor marks the spot where you are working.
3. The LLR (Line Length Remaining), in the right corner of the format field no longer reads 20 picas. The width value of each character you keyboarded has been subtracted and the LLR shows exactly how much blank space in picas and points, remains in the line.

Word Space

Action 2

Press the end paragraph key (END PARAG) at the top right of the main keyboard.

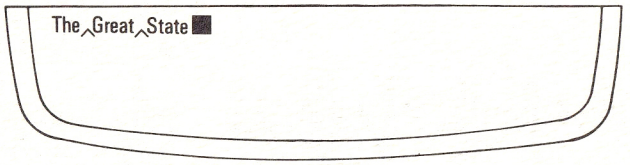
EP

Feedback

1. The words you typed moved to the center of the VDT (the output field) when you pressed the end paragraph key. The line has been sent for processing and cannot be recalled. The output field gives the operator a reminder of the last line keyboarded.
2. Noises came from the typesetter as it processed the line. You have just typeset your first line of information on the Quadritek 1200.

How to Move the Cursor

The cursor appears in the input field and keeps your place in the line. It points to places where editing may take place.



Action 3 **Keyboard the following:**

The Great State

Action 4 The cursor is controlled by the keys on the editing keyboard that are marked with arrows. **Press the left cursor control three times.**

← ← ←

Feedback Each time the key was pressed the cursor moved one character to the left.

Action 5 **Press the right cursor key three times.**

→ → →

Feedback The cursor moved right three characters.

Action 6 **Press the end-of-paragraph key (END PARAG)**

Feedback The line was sent to the output field and typeset.
NOTE: Holding the cursor keys down will give continuous cursor movement.

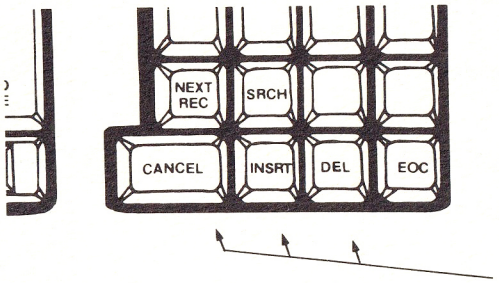
How to Edit Copy

WHY

Errors must be corrected and changes must be made before information is sent out for typesetting or recording. The editing functions allow corrections and changes to be made.

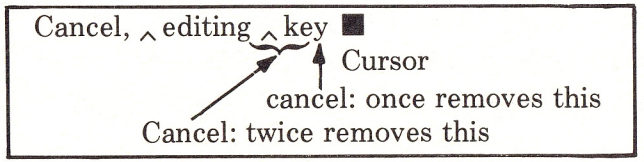
The operator has four basic ways to edit copy.

1. *Cancel* key (CANCEL) - backspaces and erases.
2. *Insert* (INSERT) key - Does not remove any information. Allows more information to be put in, anywhere in a line.
3. *Delete* (DEL) key - The operator may remove a character or characters, anywhere in a line. No space is left where a character was deleted.
4. *Strikeover* - Replaces a character with another, erasing the old character. There is no special "strikeover" key.



HOW/CANCEL

- CANCEL - Press the cancel key once to remove the last character entered (character to the left of the cursor). Press the cancel key twice to remove the last word and word space preceeding it (word and space left of the cursor).

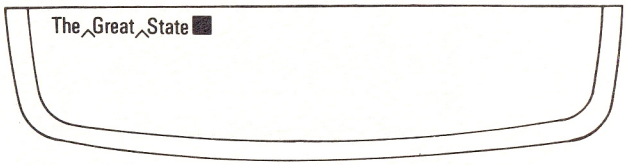


(On floppy disk units the second use of the cancel key erases characters back through a word space, *or* a comma, *or* a period.)

Action 7

Keyboard the example:

The Great State



Action 8

Press the cancel key once.

CANCEL

Feedback Verify the *"e"* has been cancelled and the KEYM is NORM.

Action 9 **Press the cancel key again.**

CANCEL

Feedback Verify that the word *"State"* and the word space in front of it have been cancelled.

Action 10 **Press the cancel key a third time.**

Feedback Verify that the word *"Great"* and the word space before it were cancelled.

Action 11 **Press CANCEL again.**

CANCEL

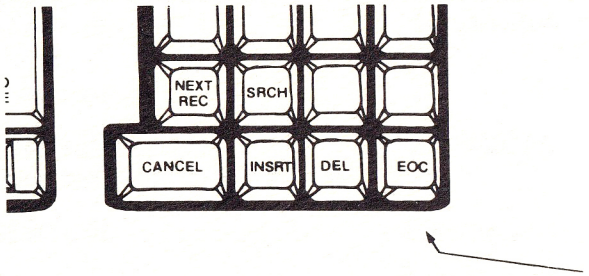
Feedback Verify that the whole line has been cancelled. Each time you pressed the cancel key the cursor moved over the whole line. This happens so that the LLR (Line Length Remaining) can be re-calculated.

Action 12 **Repeat Actions 7 through 11 and note the changes in the line and LLR as each step is taken.**

INSERT

- Insert (INSRT) -

  1. Move cursor to desired point on the line. Insertion will be between the character at the left of the cursor and the character under the cursor.
  2. Press the INSRT key. Keyboard mode (KEYM: in the format field) will change to INSR.
  3. Keyboard the information to be inserted.

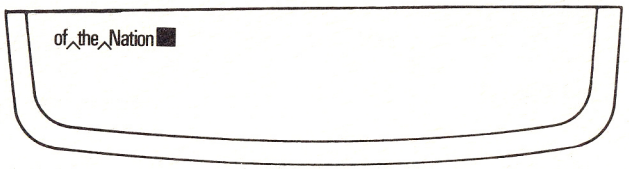


4. Press the end-of-correction - (EOC) Key to return to normal keyboard mode and to move the cursor to the right of the input information.

```
INSERT, ^ editing ^ key
        ↑↑ move cursor here
        ↑ Insert, enter information here,
          between i and t
```

Action 13 **Keyboard the following:**

of the Nation

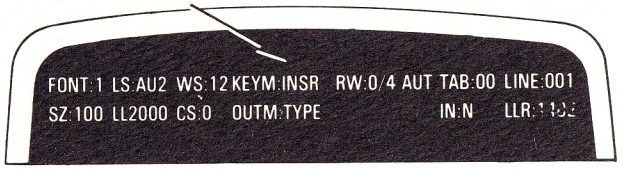


Action 14 **Move the cursor left, until it is over the first letter in the word "Nation."**

Feedback Verify that the keyboard mode, shown in the format field, is in normal (NORM).

Action 15 **Press the insert key.**

INSRT



Feedback Note that the keyboard mode has changed to INSR. Note the LLR value.

Action 16 **Keyboard the word "famous", followed by a word space.**

famous ^

Feedback Verify that the word *"Nation"* was moved to the right to allow room for the insertion of the word "famous" and a word space. Even though a word has been added to the line the LLR has not changed. The Quadritek will not change the LLR until it is told that there are no more editing changes.

Action 17 **Press the end-of-correction key.**

EOC

Feedback Verify that the KEYM is now NORM and the cursor has returned to the end of the line. Also, note the new LLR value.

DELETE

- Delete (DEL)

1. Move cursor over character to be removed.
2. Press DEL key. Keyboard mode will change to EDIT. The character under the cursor will be deleted. Hold down the DEL key and characters will continue to be removed from the right of the cursor.
3. Press end-of-correction (EOC) key to return to normal keyboard mode and to move the cursor to the right of the input data.

DELETE, editing Key
cursor here
DELETE, REMOVES Letter t

Action 18 **Move the cursor left until it is over the letter "N" in "Nation".**

Action 19 **Press the delete key, once.**

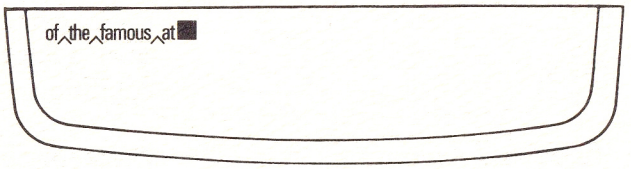
DEL

Feedback Verify that the letter *"N"* was removed and the word has been pulled left so that the cursor is over the next letter in the word. The keyboard mode has changed to EDIT.

Action 20 **Move the cursor right two characters until it is over the letter "i".**

Action 21 **Hold down the DEL key.**

DEL



Feedback Holding the delete key down caused all the characters to the right of the cursor to be moved to the left and deleted.

Action 22 **Press the EOC key.**

Feedback The keyboard mode has returned to NORM and the LLR has been re-calculated. The word "Nation" has been changed to "at."

STRIKE OVER

- Strikeover

1. Move the cursor over the character to be changed.
2. Keyboard the new character. Keyboard mode (KEYM:) will change to EDIT.
3. Press the end-of-correction key (EOC) to return to NORMAL keyboard mode and to move the cursor to the right of the input data.

Action 23 **Move the cursor left, until it is over the letter "t" in "the."**

Action 24 **Press the key for the letter "o."**

Feedback The letter "*t*" was changed to "*o*" and the cursor moved to the next letter. This is the "strikeover" function. The keyboard mode is now EDIT.

Action 25 **Press the key for the letter "n".**

Action 26

Move the cursor to the right, until it is over the letter "a" in the last word on the line.

Action 27

Keyboard the characters "pal", and the END PARAG key.

pal EP

Feedback

The line remained in the input field because the keyboard mode is EDIT.

Action 28

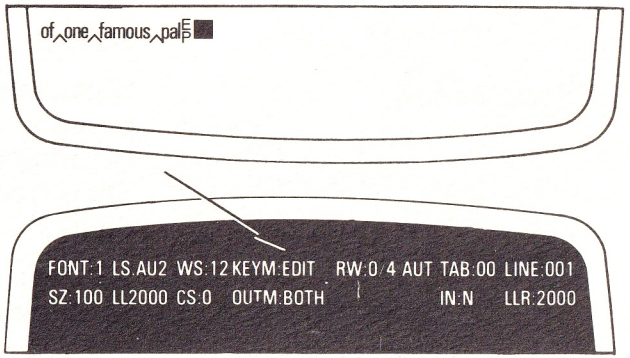
Press the end-of-correction key.

EOC

Feedback

The line ("of one famous pal") was sent to the typesetter and the keyboard mode returned to NORM.

Note: The INSRT DEL keys and the strikeover function all place the Quadritek in an editing mode. Editing changes will continue to be made until the EOC key is pressed. End-of-line commands may be inserted or struck over characters on the line but these commands will not transfer data until the operator returns to the normal keyboard mode by pressing EOC.



REVIEW

1. The initial operating values are the typesetting parameters displayed on the VDT after l _____ the program.
2. List the four Quadritek editing commands

   a. b. c. d.
3. To complete an editing command the operator must press the _____ key to return the keyboard to normal operating mode.
4. The cancel key removes the character _____ of the cursor, if pressed once. If pressed a second time the cancel function removes the _____ left of the cursor.
5. The insert key allows placement of new information between the character _____ the cursor and the character _____ of the cursor.
6. The delete key removes the character _____ the cursor.
7. The strikeover function _____ an unwanted character and _____ it with a character typed by the operator.

ANSWERS

1. loading
2. cancel, delete, insert, strikeover
3. EOC
4. left
   word and word space
5. under
   left
6. under
7. erases/removes
   replaces

How to Typeset Copy / End-of-line Commands

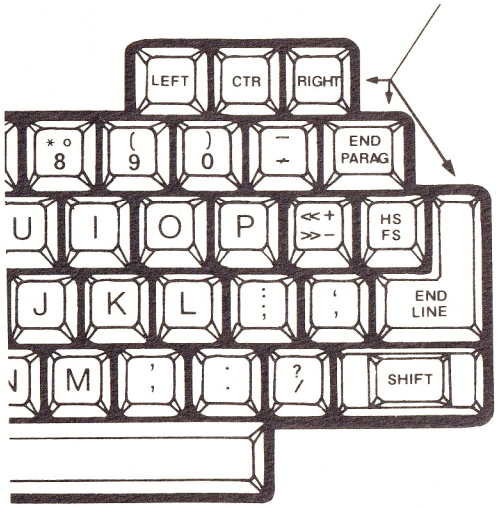
WHY

After keyboarding and correcting a line you will want to send it to be typeset or recorded. The *end-of-line commands* tell the Quadritek that editing of a line has been completed and that the line should be processed. The machine will then advance the paper and print the line.

WHAT

The five end-of-line commands are:

1. *Left* - Sets the type flush against the left margin, using the best inter-word spacing for the type size, line spacing, etc. being used. See the section on tabular/columnar mode for further information.
2. *Center* - Sets the type centered between the two margins, leaving the best inter-word spacing for the typesetting parameters in use.
3. *Right* - Sets the type flush against the right margin. The inter-word spaces are the best for the parameters.
4. *End Paragraph* - Sets the type flush against the left margin, using the most favorable inter-word spacing. See the section on tabular/columnar mode for more information.
5. *End Line* - Justifies the line. Begins at the left margin and sets type, *expanding* the word spaces to fill up the line, so that the line ends at the right margin.



HOW

There is a named key used for each of the end-of-line commands. Key names are:

1. LEFT
2. CTR
3. RIGHT
4. END PARAG
5. END LINE

WHERE

- The five keys are at the upper right of the typesetting keyboard.
- The end-of-line commands may be entered at any time, within the chosen line length.

End-of-Line Commands

Action 1

Keyboard and typeset the following example using the five end-of-line commands that are indicated:

The Quadritek 1200 L
The Quadritek 1200 C
The Quadritek 1200 R
The Quadritek 1200 E
The Quadritek 1200 E

Feedback

At the conclusion of the next section you will have processed this piece of typesetting. When you have done that, return here and compare your typeset work to that at the right. You will see how the different end-line commands affected the typesetting.

The Great State
The Great State
of one famous pal
The Quadritek 1200
The Quadritek 1200
The Quadritek 1200
The Quadritek 1200
The Quadritek 1200

REVIEW

1. End-of-line commands tell the typesetter to advance the p _____ m _____ and t _____ the line that has been keyboarded.
2. List the five end-of-line commands.

   a. b. c. d. e.
3. One end-of-line command will expand the space between words so that the line begins at the left margin and ends at the right margin (is set justified). This is the _____ command.

ANSWERS

1. photographic material, typeset
2. left, ctr, right, end parag, end line
3. end line

How to End a Job

WHY

After all lines have been keyboarded, edited, and typeset on the photographic material you must signal the completion of the job. The finished job will be advanced from the machine so that it can be developed in the chemical processor. The initial operating values of the TOS program, with the exception of the output mode, will be restored to the format field in preparation for the next job.

WHAT

There is one end-of-job command, but it can be entered in two ways.

- End of job/Automatic - 12 inches of paper after the job
- End of job/Operator selected - from 1-9 inches of the paper after the job.

HOW

To end a job, automatically advancing 12 inches of paper along with the job.

1. Press the Command Key (COMMD)
2. Enter the mnemonic for *"end job"*, ej
3. Press the END LINE key

C
ejE

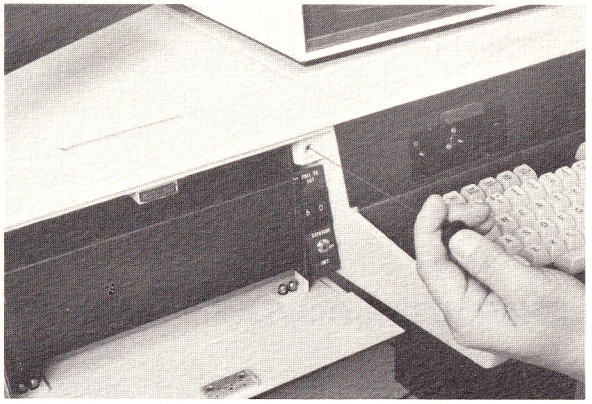
To end a job, advancing 1 to 9 inches of paper selected by the operator:

1. Press the COMMD key
2. Enter the mnemonic for *"end job"*, ej
3. Enter a number from 1 to 9
4. Press the END LINE key

For 3 inches between jobs, for example: Cej3E

Action 4

After the VDT display has come back on, pull the paper cutter (the black knob at the right of the compartment, above the initialization switch and exposure dials) until it is fully extended. Guide it back slowly.



Action 5

Remove the material cartridge by pulling it straight back. Leave the door open to remind you later to replace the cartridge.

Action 6

Carefully, pull the end of the exposed photographic material until about six inches are out of the cartridge. Fold each corner of the material at a 45 degree angle, so that the end of the paper forms a point. Fold the paper so that the pink sides are facing each other.

Feedback

Complete the following review and then proceed to the next section and process your material.

REVIEW

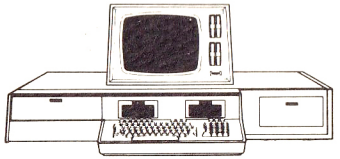
Arrange the following steps in the order you would follow to prepare a typesetting job for chemical processing. Presume that the machine is off, and is loaded with photographic material, and the initial operating values are to be used.

a. Change the output mode to TYPESETTER
b. After the VDT display comes back on cut the paper
c. Keyboard Gejf
d. Keyboard and edit the job
e. Load the TOS program
f. Remove the material cartridge
g. Select and load the fonts
h. Turn on the Quadritek

ANSWERS

h,e,g,a,d,c,b,f or h,g,e,a,d,c,b,f

How To Process Photographic Material



Introduction

Two types of photographic material may be used in the Quadritek 1200. This section will explain how to use the chemical processor for each of these types of paper.

Learning Goals

At the conclusion of this section you will be able to:

1. Load and process RC material, using the RC processor.
2. Load and process RP material, using the RP processor.

How to Process Material in the RC Processor

Why

RC, or *resin coated,* paper provides permanent copy that will last indefinitely. A three step chemical process is required to develop this photographic material.

HOW

Note: Refer to the *RC Processor Operator Manual* for complete instructions in the care, cleaning, set-up and use of this processor.

Action 1

Verify that about three inches of material have been pulled from the Quadritek material cartridge and that the corners have been folded at 45 degree angles to form a point.

Action 2

Verify that the RC Processor is on.

Action 3

Open the access door of the RC Chemical Processor and place the material cartridge in the loading area.

Feedback

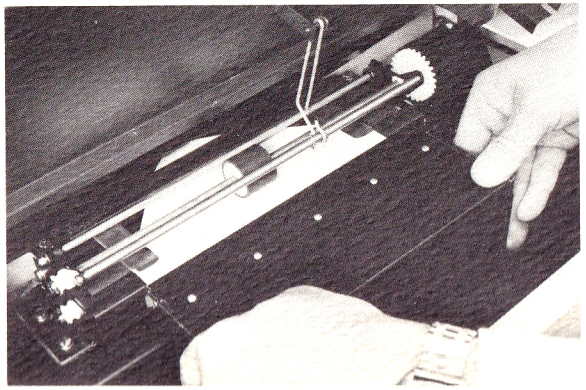
The cartridge should be against the right-hand guide.

Action 4

Feed the folded end of the photographic material into the guides, between the rubber rollers.

Feedback

Insure that the edges of the paper are aligned with the margins formed by the guides. Improper alignment may cause damage to the edge of your copy or a paper jam in the processor.



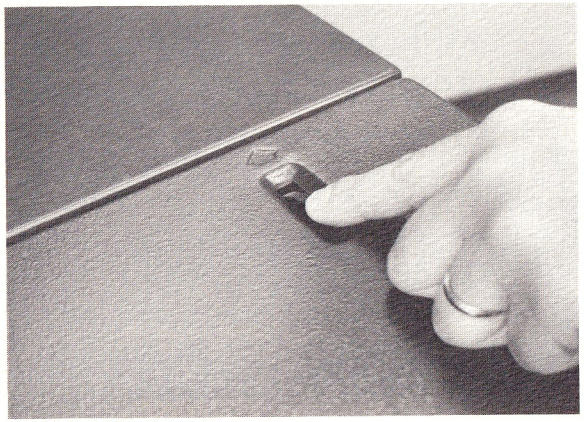
Action 5 — **Release the support bracket at the left and close the access door.**

Action 6 — **Push the thumb wheel, on the top right of the door, in the direction of the arrow.**

Action 7 — After about five turns, the wheel will begin to rotate by itself. The photographic material is being pulled from the cartridge and fed into the chemical processor.

Action 8 — **When the wheel stops turning, remove the empty material cartridge.**

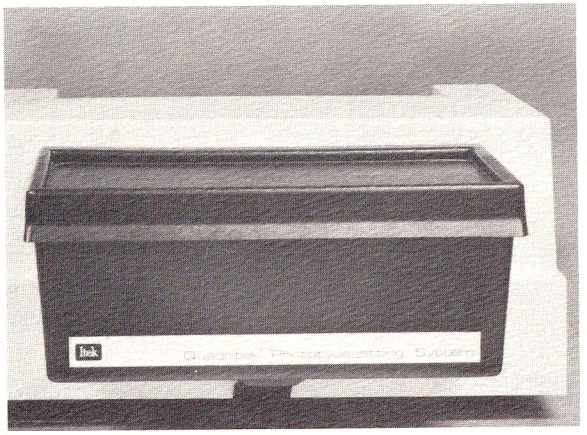
Feedback — You may now load another cartridge. After a minute or two (the time is determined by the setting of the speed control of the RC Processor) your typeset copy will leave the machine at the end opposite to where you loaded it.



How to Process Material in the RP Processor

Why — RP, or *rapid process*, paper is not a permanent paper and will eventually discolor. A two step chemical process is used with this paper.

Note: Refer to the operator's manual for complete instructions in the care, cleaning, set up, and use of this processor.



How

Action 1 — **Verify that about three inches of material have been pulled from the Quadritek material cartridge and that the corners have been folded at 45 degree angles.**

Action 2 — **Verify that the RP Processor is on.**

Action 3 — **Lift the door of the loading compartment and place the material cartridge inside. The paper should be at the top and pointing toward the processor.**

Action 4

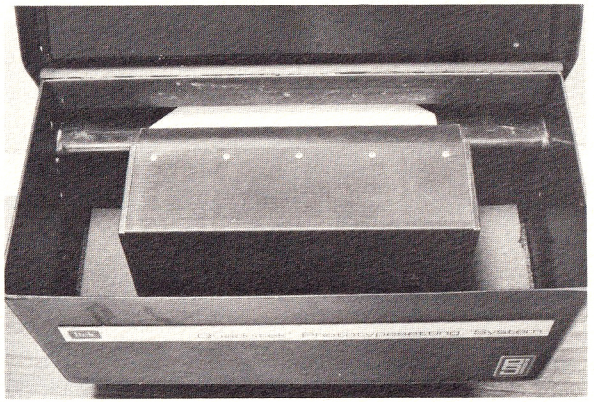
Feed the paper straight into the processor throat until it catches and close the door as quickly as possible.

Feedback

In about seven seconds the paper will leave the machine, opposite to where you loaded it.

Action 5

Grip the paper and guide it out of the processor.



MODULE III

8. Selecting Fonts, Point Sizes, Line Space, and Line Length
9. Using the Special Characters
10. Setting Justified Composition
11. Fixed Spaces and Figure Space

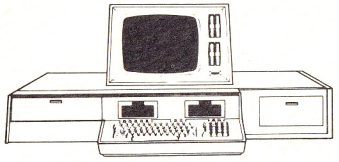
Itek

The Quadritek 1200

Operator Learning Program

MODULE III

SELECTING FONTS, POINT SIZES, LINE SPACE, AND LINE LENGTH



INTRODUCTION

In any typesetting job (one line or a complicated form) there are four values that must be established. You must know the font (type style), size of the type, line space, and line length. When you start a job, establishing these values is the first thing to do.

Up to this point in the learning program you have been using only the initial operating values to set type. This section describes how to use different typesetting values.

LEARNING GOALS

At the conclusion of this section you will be able to:

1. Use all four fonts that you've loaded into the Quadritek.
2. State the range of POINT SIZES available with the Quadritek, and be able to use them.
3. State the range of LINE SPACES (Leading) available with the Quadritek, and be able to select them.
4. State the maximum LINE LENGTH and be able to change the line length to match job specifications.

CAPABILITIES

The Quadritek 1200 can set type in:

- 4 different typefaces
- 38 point sizes, ranging from 5½ points through 36 points, in ½ point steps from 5½ through 12, and full point steps from 12 through 36 points.
- Line length up to 48 picas and 2 points, in all point sizes.
- 0 through 99.9 point line space, in 1/10 point increments.
- With automatic line spacing.

Selecting a Font

Why

Because each font represents a different style of type, fonts must be selected to match job requirements.

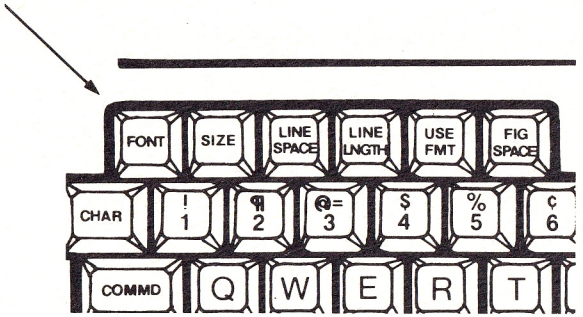
The Reasons are basic; **Greater Productivity, Faster Turn-around,** and the ability to condense printed matter.

How

To select a font

1. Press the FONT button at the upper left of the typesetting keyboard.
2. Press the key for the number 1, 2, 3, or 4 to use the desired font.

- Fonts may be selected at any time, at any position in a line or word.
- Type will be set in the type style selected until a new font is designated or the job is ended.
- When TOS is loaded, font 1 is selected.



Action/Feedback

Note: For this sequence of action/feedback, make sure that font 1 is HE 55, font 2 is HE 56, font 3 is HE 65. Font 4 can be any one.

If these fonts are not used, your typeset copy will not match the examples shown here.

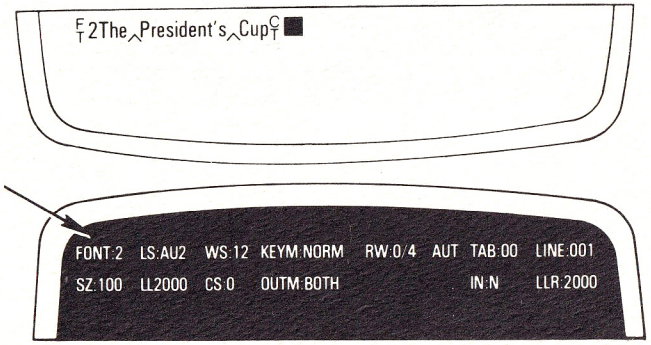
Action 1

Select font 2 and set the following:

F 2 The President's Cup C

Feedback

Verify entry of font 2 in the format field of the VDT. This line will be typeset in the type style of the font loaded in position 2.



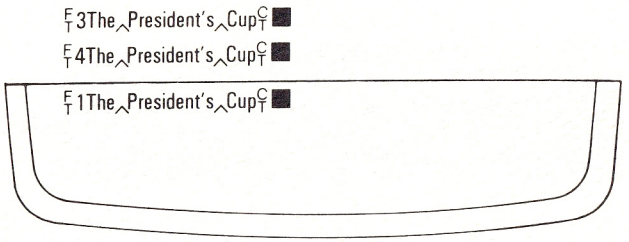
Action 2

Re-keyboard the example in fonts 3, 4, and 1

F3 The President's CupC

F4 The President's CupC

F1 The President's CupC



Feedback

Verify that the Quadritek is now using font 1. The three examples will be typeset in the three different typestyles loaded in positions 3, 4 and 1.

Selecting Point Size

Why

Different sizes of type are required in typesetting. On this page, for example, the text is a smaller size than the headings and this required the selection of different point sizes when the page was typeset.

This line is set in 10 point type

Another line, in 20 point

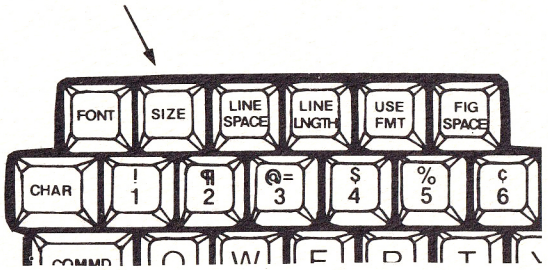
This line is the smallest; 5½ points in size.

How

To select one of the 38 Quadritek point sizes:

1. Press the SIZE key, at the upper left of the typesetting keyboard.
2. Press three number keys that correspond to the point size desired. (055 = 5½ points) Sizes from 5½ through 12 points (in ½ point steps) can be selected. 12 through 36 point is available in 1 point steps.

S055 or S360, for example

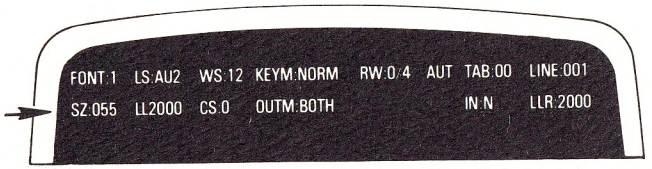


- Point sizes may be selected anytime, anywhere in a line or word.
- Type will be set in the size selected until a new size is entered or the job is ended.
- When TOS is loaded, the SIZE is 100 (10 point).

Action 3

Set the following example in 5½ point.

§055 Changing the look of a printed page may be as simple as⏎



Feedback

Verify, in the top left of the format field, that the Quadritek is using 5½ (055) point type. All copy will now be typeset in 5½ point until a new point size is selected.

Action 4

Set the following examples in the point sizes indicated:

§070 changing the point size. The distance required⏎

§090 from line to line varies with the point size⏎

§115 However, certain things never change⏎

§180 as is demonstrated by ⏎

§240 the look of this page⏎

§300 Sizes above⏎

§360 14 point are not for text.⏎

Feedback

Verify, in the format field, that 36 point is indicated - the last point size used.

Action 5

Set the following example, changing point sizes and/or fonts as indicated.

F2§055Smallest F3 §070 ^To F4§115 ^The §180Larg F1§240es §360t.F

Feedback

Point size and font changes can be keyboarded within a word or a line.

Line Spacing (Leading)

Why

Line spacing is the distance between lines, measured from the baseline of a line to the baseline of the line above. Because line spaces must be equal to or larger than the size of the type, the operator must be able to change the spacing. Special jobs and effects also may require changes in line spacing.

What

The two Quadritek line spacing modes are:

1. Automatic (AU2) - Line space is automatically 0 to 9 points more than the size of the largest type on a line. For example, the TOS program initial operating value is AU2; the line spacing will automatically be 2 points more than the largest type size that is selected. If the operator changes type sizes from line to line he/she does not have to change the line spacing, because it will automatically change to the type point size plus 2 points. In this mode the operator does not have to remember to change the line space when he changes type size. Fewer keystrokes are needed per job and errors in line space are minimized. AU0 gives SOLID TYPE with highest ascenders of a line touching the lowest descenders of the previous line.

   The amount chosen is displayed in the top line of the format field.

2. Manual (MAN) - Line spacing of 0 to 99.9 points, in 1/10 point steps, may be selected by the operator. Overlapping lines or other special effects are possible because line spacing less than the type size may be selected. When doing text work, line spacing will never be less than the point size. The amount chosen is displayed in the top line of the format field.

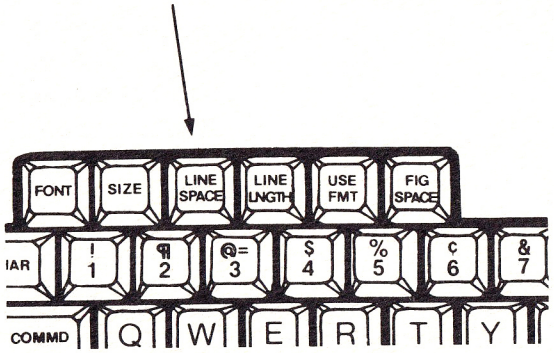
Automatic Line Spacing

How

To enter automatic line spacing:

1. Press the LINE SPACE key, at the beginning of a line.
2. Enter the mnemonic for "automatic," "au."
3. Enter a number from 0 to 9, to indicate the number of points of line space desired above the largest type size in a line. AU0 gives solid type. The initial TOS operating value is AU2.

   ⌊§au0 to ⌊§au9



Manual Line Spacing

How

To enter manual line spacing:

1. Press the LINE SPACE key, at the beginning of a line.
2. Enter three numbers that represent the desired line space, in points and tenths of points. A 000 to 999 range may be entered (00.0 points to 99.9 points of line space)

   ⌊§000 to ⌊§999

- Both automatic and manual line space selections remain in effect until a new value is entered, an end-job command is entered, or TOS is loaded or re-initialized.
- Automatic and manual line space commands must be entered at the beginning of a line, before any text.

Action 6

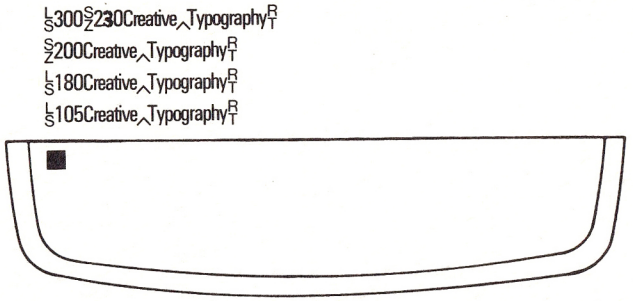
Set the following examples using the line space and point sizes shown, insuring that the line-space command is given before any copy is typeset.

LS300 SZ230 Creative Typography RT

SZ200 Creative Typography RT

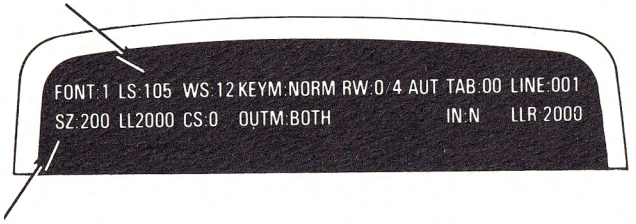
LS180 Creative Typography RT

LS105 Creative Typography RT



Feedback

Verify display of the new line space value in the format field. The line space of 105 should now be displayed. The last line keyboarded was a line space of 10½ (105) points and a point size of 20 (200). When you process your copy you will notice that the last two lines will be overlapped, Why? Because not enough material was advanced to allow for the type size used - 20 point. This is a good example of what happens any time your line spacing is less than your point size.



Action 7

Set the following examples using the automatic line spacing values and the point sizes indicated:

LSau2 Creative Typography RT

SZ160 Creative Typography RT

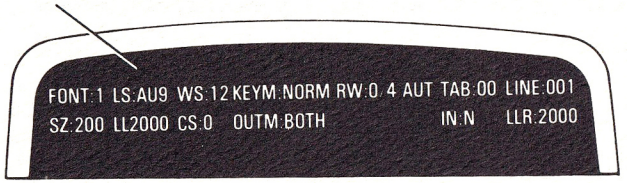
LSau9 Creative Typography RT

SZ140 Creative Typography RT

SZ200 Creative Typography RT

Feedback

Verify display of SZ: 200 and LS AU9 in the format field. On your processed copy you will note that as point size changes were made the line spacing changed automatically.



Selecting Line Length

Why

The length of lines of type may vary, depending on the job being typeset. Most lines in a book will be of the same length. But a page of advertising may contain type of many styles and sizes, in lines of different lengths.

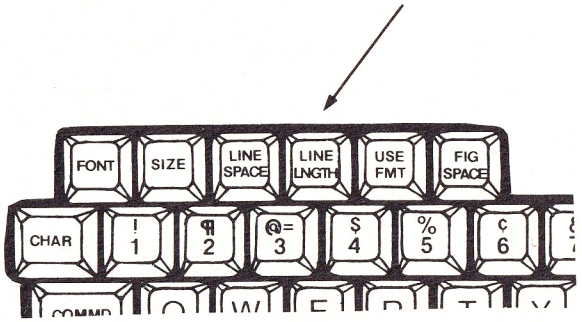
How

To set the line length:

1. Press the LINE LENGTH key.
2. Enter a four digit number. The first two numbers indicate the number of picas and the second two numbers indicate the number of points in the line.

   ⊢ (four digits, two for picas, two for points)

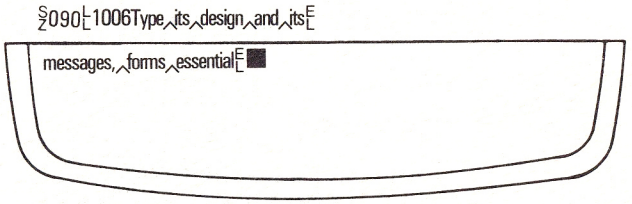
- Maximum line length is 48 picas and 2 points (LL:4802)
- Initial line length, when TOS is loaded, is 20 picas.
- Line length can be entered only at the beginning of a line, before any information that is to be typeset.
- Line length values remain in effect until a new value is entered or the initial operating values are restored.



Action 8

Set the following example using the line length indicated:

§090⊢1006Type, its design and its⊣
messages, forms essential⊣



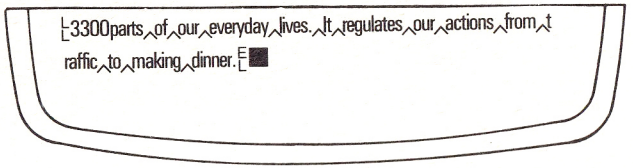
Feedback

Verify entry of the new line length in the format field of the VDT.

Action 9

Change the line length as indicated and set the following:

⊢3300parts of our everyday lives. It regulates
our actions from traffic to making dinner.⊣



Feedback

Verify entry into the new line length in the format field. This line will be set at 33 picas in length. Changing the line length must be done at the beginning of the line before any settable text.

Action 10

End-job and process your copy. Compare with the example below.

Feedback

If your copy does not match the example shown here, re-keyboard the examples carefully.

The President's Cup

The President's Cup

The President's Cup

The President's Cup

Changing the look of a printed page may be as simple as

changing the point size. The distance required

from line to line varies with the point size

However, certain things never change

as demonstrated by

the look of this page

Sizes above

14 point are

not for text.

Smallest To TheLargest.

Creative Typography

Creative Typography

Creative Typography

Creative Typography

Creative Typography

Creative Typography

Creative Typography

Creative Typography

Creative Typography

Type, its design and its

messages, forms essential

parts of our everyday lives. It regulates our actions from traffic to making dinner.

REVIEW

Match the left-hand column to numbers in the right-hand column.

1. The number of Quadritek fonts.
2. The smallest size type the Quadritek sets.
3. The largest Quadritek type size.
4. Size increments or steps from 5½ to 12 point type.
5. Size increments or steps from 12 to 36 point type.
6. Initial TOS value of line spacing.
7. Keyboard entry for solid type (with 10 point type).
8. Keyboard entry for 7½ point type.
9. Keyboard entry for 24 point type.
10. Keyboard entry for 5 points of automatic line space.
11. Keyboard entry for 24 points of line space.

a. AU2
b. §075
c. ⅊AU0
d. .5 points
e. 4
f. §240
g. 36 points
h. ⅊075
i. .1 point
j. 1 point
k. ⅊AU5
l. ⅊050
m. ⅊100
n. 00.0 points
o. 5½ points
p. ⅊240

ANSWERS

1. e, 2. o, 3. g, 4. d, 5. j, 6. a, 7. c or m, 8. b, 9. f, 10. k, 11. p, (h. 7.5 points of *line space*, i. *Line space* steps in size l. 5 points of *line space* n. Smallest *line space*)

EXERCISE

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

SPECIAL

EVENING GOWNS

Dance your way into his heart
with these lovely gowns in
White, Gold or Black.
Sizes 10 to 16

$79

Tips for Setting this Exercise:

1. The box after 21½ represents picas. This indicates the line length that is to be used.

2. A half pica is 6 points.

3. On marked up copy, anything underscored with a straight line is to be set in italic. Anything underscored with a wavy line is to be set in a bold face.

4. The brackets around each line indicate that the line is to be set centered. ⊐ ⊏

5. When marking font, size, line space or line length changes, the typesetter must be in lower case. If you are in the shift position it will "beep" and lock up.

Selecting Fonts, Sizes, Line Space and Line Length

Typeset the exercise, following the mark up instructions. Refer to the step by step instructions if you have any problems.

21½ □ HE.

36/38 SPECIAL [ital.

24/26 EVENING GOWNS [ital.

VOM. 10/16 Dance your way into his heart [

with these lovely gowns in [

White, Gold, or Black [

Sizes 10 to 16 [

36/42 $79 [bold

Exercise Keystrokes

F2 §360 §380 L2106 SPECIAL¢

§240 §260 EVENING GOWNS¢

F1 §100 §160 Dance your way into his heart¢

with these lovely gowns in¢

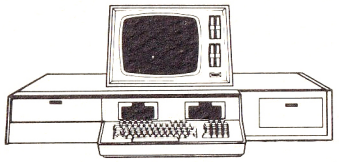
White, Gold, or Black¢

Sizes 10 to 16¢

F3 §360 §420 $79¢

Begin

USING THE SPECIAL CHARACTERS



Introduction

Each font contains 112 characters. Eighty-three of these have a key on the typesetting keyboard. The other 29 SPECIAL CHARACTERS are typeset by entering mnemonic codes.

1234567890-
qwertyuiop»
asdfghjkl;'
zxcvbnm,./
!¶ @$%¢&*()-
QWERTYUIOP«.
ASDFGHJKL:'
ZXCVBNM,.?

KEYBOARD CHARACTERS

[ ] □ – — | ___ ½ ⅓ ¼ ⅔ ¾
⅛ ⅜ ⅝ ⅞ { } ™ ✓ † ‡ ®
§ © ● £ ★ ■ ² ³ <
> × ÷ ' ± ● ○ ☆

SPECIAL CHARACTERS

Learning Goals

At the conclusion of this section you will be able to:

1. Identify the roman and italic characters on KEYBOARD LAYOUTS.
2. Use the character key (CHAR) and mnemonics to typeset special characters that do not appear on the keyboard.

Quadritek Capabilities

The Quadritek 1200 can typeset:

- 112 characters per font

How to Use the roman/italic Keys:

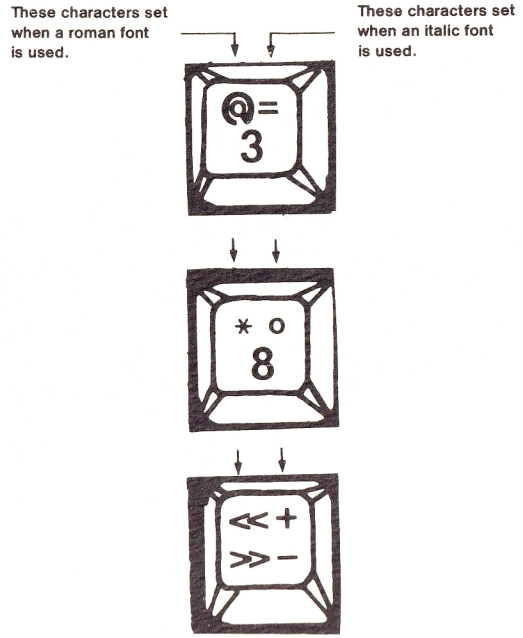
Some keys on the typesetting keyboard show more than two characters.

These are:

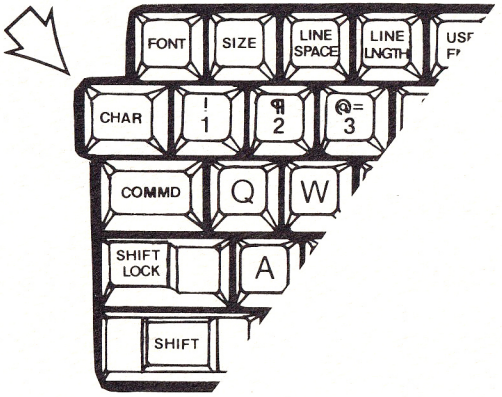
1. Left-hand characters - these characters will be typeset when a roman font is used (45, 55, 65, etc.)
2. Right-hand characters - these will be typeset when an italic font is used (46, 56, 66, etc.)

For example: the key with the number three may also have the upper case characters @ and =. The @ character will be typeset when a roman font is used and the = character will appear when an italic font is used.

Note: Only the characters on the left of the key will appear on the VDT, no matter what kind of font is being used.



How To Typeset Special Characters



To typeset one of the 29 special characters that do not appear on the keyboard:

1. Press the character key (CHAR)
2. Enter the mnemonic for the special character.

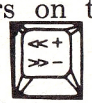
- Special characters may be entered at any time.
- The CHAR key must be pressed before each special character mnemonic that is entered.

The chart below shows the mnemonic codes for all the roman and italic special characters. Familiarize yourself with its contents.

		Roman	Italic
Open (Left) Bracket	CH lb	[	[
Closed (Right) Bracket	CH rb	]	]
Square Box	CH sb	□	■
En Dash	CH nd	–	–
Em Dash	CH md	—	—
Vertical Rule	CH vr	|	
Baseline Rule	CH br	—	
Superior 2	CH s2		^{2}
Superior 3	CH s3		^{3}
1/2 Fraction	CH 12	½	½
1/3 Fraction	CH 13	⅓	⅓
1/4 Fraction	CH 14	¼	¼
2/3 Fraction	CH 23	⅔	⅔
3/4 Fraction	CH 34	¾	¾
1/8 Fraction	CH 18	⅛	⅛
3/8 Fraction	CH 38	⅜	⅜
5/8 Fraction	CH 58	⅝	⅝
7/8 Fraction	CH 78	⅞	⅞
Open (Left) Brace	CH ob	{	

		Roman	Italic
Closed (Right) Brace	CH cb	}	
Less Than Sign	CH lt		<
Greater Than Sign	CH gt		>
Trademark	CH tm	™	
Times Sign	CH ti		×
Check	CH ck	✓	
Division Sign	CH di		÷
Double Dagger	CH dd	‡	‡
Dagger	CH dg	†	†
Register Mark	CH rg	®	
Prime	CH pr		′
Number Sign	CH no	#	
Plus/Minus	CH pm		±
Section Mark	CH sn	§	§
Copyright Mark	CH cr	©	
Small Bullet	CH bs		•
Bullet	CH bu	●	○
Pound Sterling	CH ps	£	£
Star	CH st	★	☆

REVIEW

1. When an italic font is used, the two characters on the _____ of this key will be typeset. 

2. Write the keyboard instructions that would be used to typeset the following line:

   ● ⅛ plus ⅓ ★ [special characters]

ANSWERS

1. right (+ and -) will be typeset
2. Shift^ F18^plus^ F13^ Fst^ Slb special^ characters Frb

Special Characters

Action/Feedback

Action 1

Using a roman font in position 1, keyboard the following characters: (These characters appear on the keyboard.)

@ * « » ⁵⁄₁

Feedback

Verify, as these characters are keyboarded, that they appear on the VDT.

Action 2

Using an italic font in positon 2, keyboard the following characters: (These characters are on the keyboard.)

⁴⁄₁2 = ° + - ⁵⁄₁

Feedback

The characters that appear on the VDT are the same as those for the roman font. However, the characters that will be typeset are from the italic font.

Action 3

Keyboard all the special characters using an end-paragraph as shown.

F1 S160 L240 L1800 Clb Crb Csb Cnd Cmd Cvr Cbr C12 C13

C14 C23E

C34 C18 C38 C58 C78 Cob Ccb Ctm Cck Cdd Cdg CrgE

Cno Csn Ccr Cbu Cps CstE

F2 Csb Cs2 Cs3 Clt Cgt Cti Cdi Cpr Cpm C bs Cbu Cps CstE

Feedback

Notice that the CHAR key must be pressed before each special character mnemonic and, for italic characters, the italic font must be in use. If it is not, the mnemonics will use a roman character that it *thinks* is in the same location on the font.

@*«»
=°+−

[]□—┤ ___½⅓¼⅔

¾⅛⅜⅝⅞{}™ ✓ ‡ † ®

§ © ● £ ★

■ 23 <> × ÷ ′ ± ● ○ £ ☆

Exercise/Special Characters

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

★★★★★

FOREMANS™

[Special Today]

½ Price

✓ These Bargains!

- Sofas Reduced ⅓
- Dinettes—SAVE ¼
- and More!

Branch store #16 only!

★★★★★

Tips for Setting this Exercise

1. Beginning with the second line, a line space of au6 is used. This eliminates the necessity of line space changes with every size change.

F1 §160 §180 L2400 Gst Gst Gst Gst Gsr G

F3 §360 §Au6 FOREMANS Gtm G

F1 §240 Glb Special Today Grb G

§160 G12 Price G

§120 Gck These Bargains! G

§100 Gbu Sofas Reduced G13 G

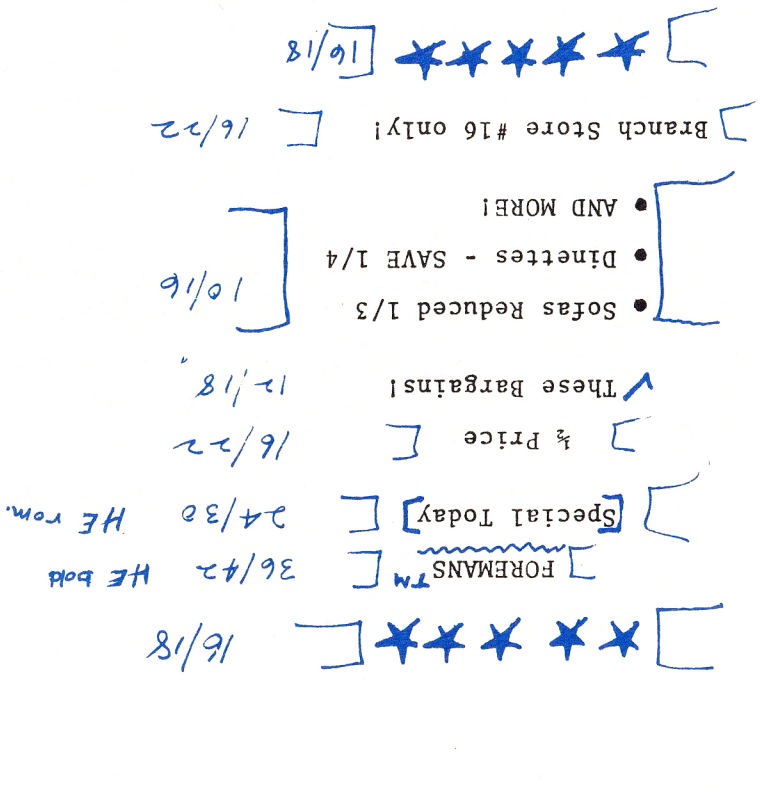
Gbu Dinettes HGmd H SAVE G14 G

Gbu And More! G

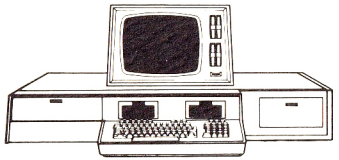
§160 Branch store Gno 16 only! G

Gst Gst Gst Gst Gst G

GejE



SETTING JUSTIFIED COMPOSITION



Introduction

You learned in *Section 3* that justified composition has lines of type that begin at the left margin and end at the right margin. Space between words is expanded or reduced to accomplish this. Word spaces can be expanded beyond those normally used, to force justify a line. In this section the Quadritek 1200 justification methods will be explained.

Justified composition – left to right

Typesetting came of age for in-plant operators with the advent of the easy to understand and use Mnemonic Coding.

Learning Goals

At the end of this section you will be able to:

1. Define and demonstrate the *justification range* and identify the things that affect this range.
2. Set justified type in both *automatic and manual line ending modes.*
3. Identify *word breaks* and demonstrate the use of the *discretionary hyphen.*

Capabilities

The Quadritek can:

- Justify composition automatically, ending the lines at the best possible place, using the word spacing chosen by the operator.
- Justify composition, ending the lines only at places chosen by the operator. This includes forced justification.
- Justify composition, ending the lines at the best of several possible places that have been indicated by the operator.
- Examine the end-of-line commands entered by the operator and re-justify the composition, using the best word spacing.

Justification Range

Why

Composition that is easy to read properly balances the type size and the spaces between the words. Too much or too little space between words makes the text hard to read. The Quadritek 1200 initial operating values include ideal word spacing of 12 relative units. This ideal value may be expanded or reduced a certain amount and still provide good composition. Maximum word space is double the ideal or 24 relative units. Minimum word space is one half the ideal or 6 units.

Initial Operating Value	Word Space Calculation
Optimum Value	12 Relative Units
Maximum Word Space	24 Relative Units
Minimum Word Sapce	6 Relative Units

This means that any line of type can be automatically justified by the Quadritek with as few as 6 relative units of space between each word, and as many as 24. When this range is being used the Quadritek is within its JUSTIFICATION RANGE. The justificiation range is the point in a line where the line can be set justified, using word space that is between the minimum and maximum values.

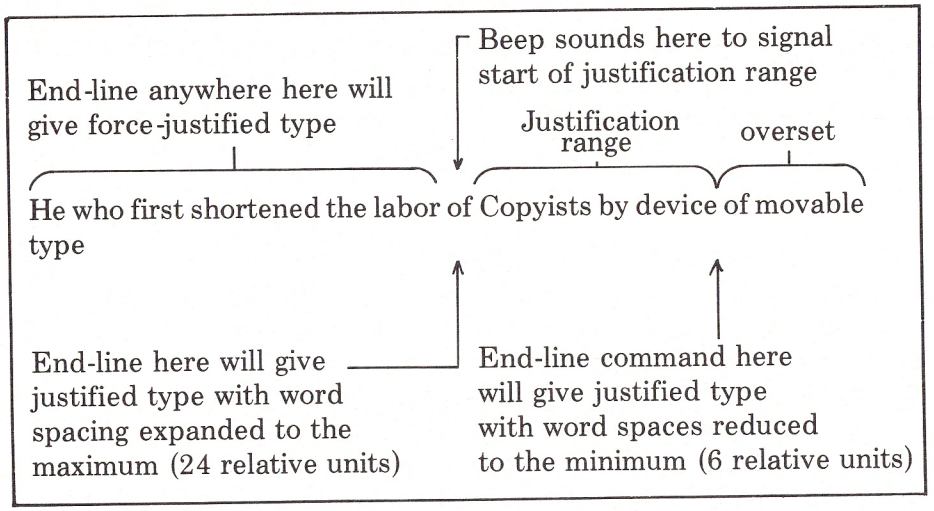
If a line is ended, using the end-line key, before the justification range is reached, the line will be set justified. However, the word spaces will be expanded beyond the maximum that was established by the initial operating value. Justifying a line by ending it before the justification range is called FORCE JUSTIFYING.

Force Justified Line. Non Force Justified Line, set to the parameters in the Format Field.

As the operator keyboards information he will hear a "beep" as he approaches the end of a line. This is like the bell on a typewriter and is a signal from the Quadritek that the justification range has been reached. If an end-line command is entered at this point the

line will be typeset with word spaces that have been expanded to the maximum. If the operator continues to keyboard words he will soon come to the end of the line measure (where the line length remaining has counted down to zero). If an end-line is entered here the line will be typeset with the minimum space between words.

If an end-line command is entered before the justification range has been reached, the word spaces must be expanded beyond the maximum and the line will be force justified.

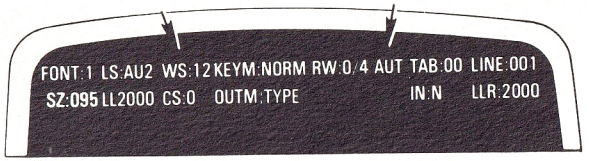


The decision to complete a line of type and enter the end-line (END LINE) command may be given to the Quadritek to do automatically or the operator may enter the command manually.

To obtain maximum results on this Action/Feedback, you should have an HE 55 font in position 1.

Action 1

Select output mode TYPE, a type size of 9½ points, and a line length of 20 picas. The word space value in the format field should be "WS:12."



OMT095 L2000

Feedback

Keyboard the following:

Force justified line

Feedback

No "beep" has been heard. The justification range has not been reached. If the line is ended now, the spaces between words will be beyond the maximum (the word space indicated in the format field is 12 relative units so the maximum would be 24 relative units. If the line is set at this time the space between words will be more than 24 relative units.) The line will be force justified.

Action 2

Enter an end-line command to force justify the line.

E
L

Action 3

Keyboard the following:

The justification range has been reached when

Feedback

The "beep" was heard when you completed the last word. (If you are not using an HE 55 font the "beep" may not be heard yet or may have come before the last word.) The justification range has been reached. If the end-line key is pressed now, the spaces between words will be expanded to nearly the maximum.

Action 4

Watch the line length remaining (LLR) as you typeset each letter of the following word.

you

Feedback

As the line length remaining decreased, the spaces needed between words to justify the line decreased. The minimum word space has nearly been reached.

Action 5 **Enter an end-line command.**

E
L

Feedback The line will be typeset justified, with word spaces near minimum. The line was typeset within the justification range.

Automatic Line Ending

The initial line ending mode, when TOS is loaded, is automatic (AUT). When the justification range has been reached, the Quadritek will automatically end the line at a good place. To do this it must find one of the following within the justification range:

1. Word space – the last word space in the justification range will be replaced with an end-line command. Characters following the word space will be carried over and used in the next line.
2. Hyphen, em dash, en dash – the last hyphen or dash that fits in a line will be followed by an end-line command. (An em dash is a dash that is the width of a capital M and an en dash is a dash that is the width of a capital N.)
3. Discretionary hyphen – these are "optional hyphens." When you hear the "beep" at the beginning of the justification, start placing discretionary hyphens at legal hyphenation points in words. The Quadritek will pick the last discretionary hyphen that fits and typeset it as a regular hyphen. Any discretionary hyphens that are not used are ignored by the typesetter and will not appear on the finished copy.

- hyphen

— Em dash

— En dash

discretionary hyphen

If the Quadritek cannot find a word space, hyphen discretionary hyphen, em dash, or en dash in the justification range it cannot automatically end the line. To do so would mean accepting characters beyond the line length or ending the line before the justification range. Because decisions to force justify or increase the line length are reserved for the operator, the Quadritek will stop automatic operation and display the message "CANNOT BREAK," if a line cannot be automatically ended.

Action 6 **Read the word-space value in the format field of the VDT.**

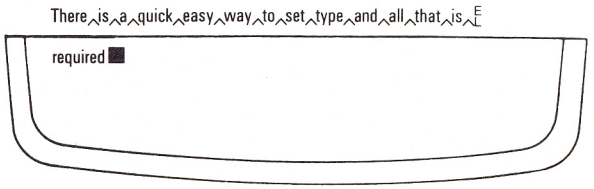
Feedback Verify the value is set at WS:12

Action 7 **Keyboard the command for automatic line-ending.**

$^{C}_{D}$au

Action 8 **Keyboard the following example. When you hear the justification range "beep", continue keyboarding, inserting word spaces where needed.**

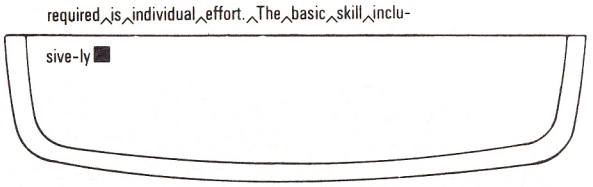
There is a quick easy way to set type and all that is required



Feedback When a word space is keyboarded near the end of the justification range the end-line is inserted, *replacing* the last word space. The line moves to the output field, and is justified. The remaining characters stay in the input field with the cursor to their right. Keyboarding should continue without interruption.

Action 9 **Continue keyboarding. This time insert regular (hard) hyphens after the justification range "beep," at all good hyphenation points. (Remember, the hard hyphen is in the shift position of the hyphen key).**

is individual effort. The basic skill inclu-sive-ly

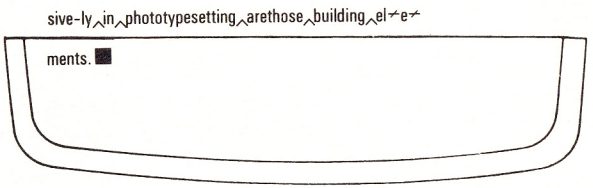


Feedback When a hyphen, em dash or en dash is keyboarded after the justification range, and it fits within the line, an end-line is inserted and the line is moved to the output field. The excess characters remain in the input field and the cursor moves to the right so keyboarding can continue. In this line, two hard hyphens were keyboarded and two hyphens will appear on the typeset copy.

Action 10

Continue keyboarding. This time insert discretionary hyphens) after the justification range "beep."

in phototypesetting are those building el-e-ments.



Feedback

In this example, the Quadritek chose the discretionary hyphen that would best fit, and placed an end-line after it. Only the discretionary hyphen used at the end of the line will be typeset. The other will be ignored by the typesetter.

Overset

If a word space, hyphen, em or en dash, or discretionary hyphen does not appear in the justification range, and the line-length-remaining reaches zero (LLR:0000), the Quadritek will enter an OVERSET condition. In overset:

1. Characters entered beyond the justification range will flash.
2. The cursor will move back to the right of the first character in the justification range.
3. The message "CANNOT BREAK" will be displayed on the VDT.
4. The keyboard will lock, preventing the entry of more characters.
5. The operator must make an end-line decision.

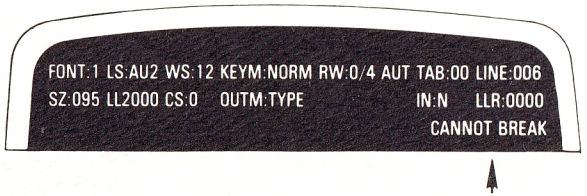
Action 11

Continue keyboarding. This time do not insert a word space, hyphen, em or en dash, or discretioanry hyphen in the justification range.

These basic elements combined for aesthetic

Feedback

Verify that you are in an overset condition, the message "CANNOT BREAK" appears in the right of the format field, the cursor is at the beginning of the justification range, and the overset character is flashing.



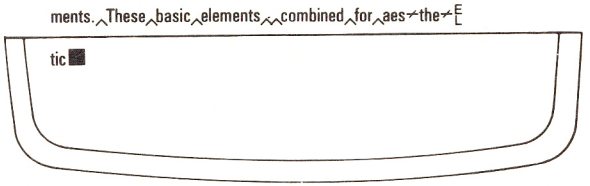
Action 12

Insert the discretionary hyphen at a good word-break and follow with the EOC.

INSRT

ments These basic elements combined for aes-the-ti

EOC



Feedback

The line was sent to the output field after inserting an end-line after the discretionary hyphen that best fit the line. The remainder of the word was left in the input field.

Action 13

Keyboard an end-paragraph after the last word.

tic

Feedback

Verify that the line has been sent to the output field. The end-paragraph key should always be used to set the last line of a paragraph, whether in or outside of the justification range. Using the end-paragraph key guarantees that the line will always be set flush left, against the left margin.

Manual Line Ending

In manual line ending mode the format field will display MAN. In this mode:

1. Entering an end-line, within the justification range, will give justified composition with the word spaces never exceeding the maximum (as defined in the Format Field).
2. Entering an end-line, before the justification range is reached, will force justify the line and expand the word spaces beyond the maximum.
3. Entering an end-line after a line is filled (LLR:0000) will result in an overset condition. In overset:
   1. The keyboard will lock and a "beep" will be heard.
   2. The overset characters will blink.
   3. The operator must make an end-of-line decision.

How

To enter the manual line ending mode, press the command key and the mnemonic "MA."

CMA

- This must be entered at the beginnning of a line.
- The manual line-ending mode is cancelled when automatic line-ending mode is entered, an end-job command is given, TOS is loaded, or the Quadritek is turned off.

Manual line ending mode is primarily used when playing back data that has already been recorded, and in which no changes are desired. This prevents the Quadritek from automatically re-justifying lines that were purposely force justified or typeset with other special line ending decisions.

Automatic line ending mode is particularly useful, when playing back pre-recorded data, when a new point size or line length is desired. Lines will be automatically re-justified, the Quadritek stopping only when it "cannot break."

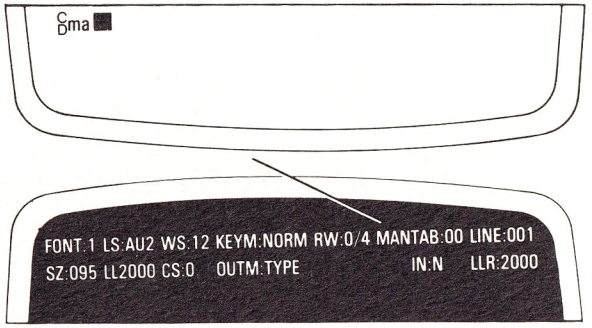
Action 14

Keyboard the command for manual line-ending.

Cma

Feedback

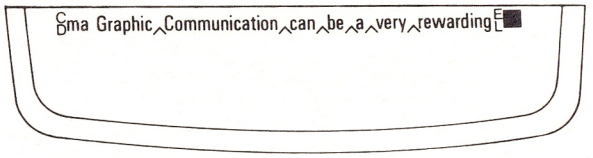
Verify that the format field shows that the Quadritek is in the manual line-ending mode. The letters MAN will be displayed to the left of the word TAB.



Action 15

Keyboard the following line, stopping when the "beep" for the justification range is heard. At the next possible word break, end the line using the end-line key.

Graphic Communications can be a very rewarding E



Feedback

The word spaces will be expanded to maximum if the line was ended when the "beep" was heard. The word space value is at maximum expansion at the beginning of the justification range and works towards minimum at the end of the justification range.

Action 16

Keyboard the example and at the same time watch the LLR. End the line at the best possible word break when the LLR counts down to less than 1 pica.

occupation, especially when considering two of the

Feedback

The word spaces will now be approaching minimum because you are at the end of the justification range.

Action 17

Keyboard the following without striking an end-line.

alternatives; the one to be discussed and one we will

Feedback

Verify that you are now in an overset condition. Notice that the overset character and the cursor are blinking. The keyboard is locked up and will not accept additional input.

Action 18

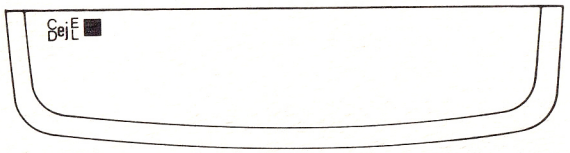
Move the cursor back to a good place to end the line. Strike-over the word space with an end-line or insert a hyphen and end-line at a good word break. Then press the EOC key.

alternatives. The one to be discussed and one we

EOC

Feedback

Verify that the line has been transferred to the output field. Also, the remaining information is in the input field with the cursor all the way to the right.



Action 19

Finish typing the rest of the word. Follow with an end-paragraph.

will

Feedback

Verify that the line has been sent to the output field.

Action 20

Give the end-job command and process your work.

ej

Feedback

Compare the processed copy with the examples to the right. Do the examples again if there are any mistakes.

Line Ending Modes	Enter	Cancelled
Automatic (AUT)	au	Entering Manual Mode
Manual (MAN)	ma	Entering Aut, end- of-job, TOS loaded, Quadritek off

Force justified line
The justification range has been reached when you
There is a quick easy way to set type and all that is required is individual effort. The basic skill inclusive-ly in phototypesetting are those building elements. These basic elements combined for aesthetic
Graphic Communication can be a very rewarding occupation, especially when considering two of the alternatives; the one to be discussed and one we will

From Manual to Automatic Mode

To enter the automatic line-ending mode from the manual mode keyboard the command key and the mnemonics "au".

au

- This must be given at the beginning of a line.

Review

Match the words to the definitions:

1. Justified composition
2. Justification range
3. Forced justification
4. Manual line ending
5. Automatic line ending
6. Hyphen, word space, en dash, em dash, discretionary hyphen

a. An end-line command is placed in a line of type by the Quadritek operator.
b. An end-line command, here, gives justified composition without stretching word spaces beyond the ideal maximum or squeezing them smaller than the ideal minimum.
c. Words on a line begin at the left margin and end at the right margin.
d. In automatic line ending, the Quadritek looks for these in the justification range so it can end the line.
e. Possible places, in the justification range, to end a line.
f. In automatic line ending, without these the Quadritek "CANNOT BREAK."
g. An end-line command is placed in a line by the Quadritek.
h. An end-line has been entered before the justification range has been reached.
i. Word spaces are larger than the ideal maximum.

Answers

1. c
2. b
3. h and i
4. a
5. g
6. d, e, f

Exercise/Justified Composition

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

COMMUNICATIONS

Communicating has always been an important human activity. It has been responsible for the development of cultures and their evolution or downfall. Until recently, human communication techniques have been limited to the spoken and written word, sign language, and forms of artwork.

During the Industrial Revolution, new communication techniques began to evolve. Telegraphs, telephones, phonographs, radios, photographs, motion pictures, and television were all developed in a relatively brief span of time. Communication equipment and techniques are still being developed and improved.

Tips for Setting this Exercise

1. Use two full spaces (FF SS) for a paragraph indent.

2. When working in manual line-ending, listen for the justification range "beep." This signals the operator that an end-line decision will soon be needed.

3. When keyboarding in automatic line-ending, type a paragraph as one long line. The operator doesn't need to be concerned with end-line decisions. Just keyboard an end-paragraph at the end of each paragraph.

4. When setting justified composition, any time a word needs to be hyphenated to justify a line, (even in manual line ending) use a discretionary hyphen. Whenever a hyphen *must* be there (in a phone number for example), use the regular *(hard)* hyphen.

Typeset the following marked up exercise in manual line ending mode.

HE 13½ 10/12 COMMUNICATIONS bold

7/9 rom. Communicating has always been an important human activity. It has been responsible for the development of cultures and their evolution or downfall. Until recently, human communication techniques have been limited to the spoken and written word, sign language, and forms of artwork.

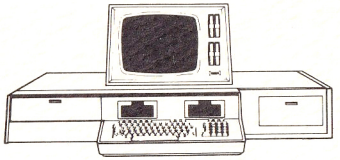
Continue typesetting, but set this exercise in automatic line-ending.

During the industrial revolution, new communication techniques began to evolve. Telegraphs, telephones, phonographs, radios, photographs, motion pictures and television were all developed in a relatively brief span of time. Communication equipment and techniques are still being developed and improved.

EXERCISE/KEYSTROKES

F3 §100 §AU2 F1306 §ma COMMUNICATIONS¢
F1 §070 §§ Communicating . . . (use end lines as needed)
artwork§
Gau§§During . . . improved.§ Gej§

FIXED SPACES AND THE FIGURE SPACE



INTRODUCTION

In justified composition the spaces between words and symbols increase or decrease as needed to justify the line. To establish a white space between words or symbols that will *not* vary, a FIXED SPACE must be entered. FIGURE SPACES (equal to the width of the numbers in a font) are needed to align numbers of different lengths in a column. One entry may be 99.9 and the next vertical entry 399.1. To put these one under the other, with the decimal points aligned, requires the use of figure spaces.

321	334	122	898
6787	8970	564	2345
3	45	2111	3450
564	8976	3464	8909

LEARNING GOALS

At the end of this section you will be able to:

1. Insert *fixed space in copy.*
2. Insert *figure spaces* in copy, to align columns of numbers.

QUADRITEK CAPABILITIES

The Quadritek 1200 can typeset, using three sizes of fixed spaces. They are:

- FULL SPACE (FS) - a space of 18 relative units, equal to one en (a space the width of a capital N).
- HALF SPACE (HS) - a space of 9 relative units, equal to one half en (a space ½ the width of a capital N).
- FIGURE SPACE (FIG SPACE) - equal to the width value of the numbers (0 - 9) of the font in use.

Full Space between characters

M M i i A A g g

Half Space between characters

M M i i A A g g

FS/HS

A full space or half space is entered by pressing the FS/HS key at the right of the main keyboard.

F S or H S

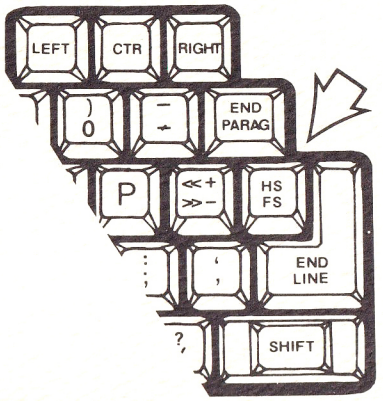
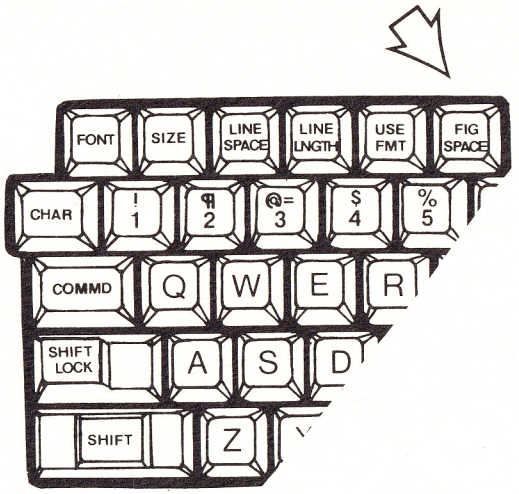


Figure Space

A figure space entered by pressing the FIG SPACE key at the top of the main keyboard.

F
G

- A dollar sign ($) has the width value of a figure space.
- A percent sign (%) is wider than a figure space.



REVIEW

1. The space created when the full-space key is used is _____ .
2. The space created when the half-space key is used is _____ .
3. The space created when the figure-space key is used is _____ .

ANSWERS

1. 18 units (1 en)
2. 9 units (½ en)
3. equal to the width value of the numbers of the font in use.

FIXED, FIGURE SPACES

Action/Feedback

Action 1

Keyboard the following, using the fixed-space key in the "shift" (upper case) position for a half space.

John⁸Doe^Ext.⁸312⁸

FEEDBACK

The words "John Doe" will be positioned against the left margin and the words "Ext. 312" will be positioned against the right margin. On your output copy, or the example below, you will notice that the word space was expanded to justify the line. The half spaces are fixed amounts of space, so they were not expanded.

Action 2

Keyboard the following, using the fixed-space key in the "unshift" position for a full space.

Joan[F/S]Public^Ext.[F/S]302[F/L]

Feedback

This time the words "Joan Public" will be against the left margin and the words "Ext. 302" will be againt the right margin. The word space will be expanded to justify the line.

Action 3

Set the following numbers, centered, using the figure space to align the column.

[F/G]99[C/T]
199[C/T]
[F/G][F/G]9[C/T]
9[F/G][F/G][C/T]

Feedback

Using the figure spaces, the column of numbers will line up. If the figure space had not been used, the column of numbers would not have aligned on the page.

Action 4

Now process the copy and compare it with the copy located to the right.

[C/D]ej[F/L]

Feedback

The copy should match. If it does not, re-do the examples.

John Doe Ext. 312
Joan Public Ext. 302
99
199
9
9

EXERCISE/FIXED SPACES

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy.

Tom Johnson Chairman of the Board
Paul Smith Assistant Cashier

1. This is a sample.
2. The full, half, and figure spaces have a fixed value.
3. The word space can be expanded or reduced.

199
$4322
38
7
256
1200

Tips for Setting This Exercise

1. One way of putting extra space between sections is to put in an extra end-of-line.
2. A dollar sign has the width value of a figure space.
3. A per cent sign is wider than a figure-space.

Fixed Spaces Exercise

Typeset the following lines using a half space between words. Use a word space where indicated and end the lines with an end-line. Compare your copy to the example.

11/AUZ HE rom. 20□

Tom HS Johnson ^ Chairman HS of HS the HS Board EL

Paul HS Smith ^ Assistant HS Cashier EL

Center the following column of numbers, using the figure space key.

7/9 HE ital.

1. FS This is a sample. EL

2. FS The full, half, and figure spaces have a fixed value. EL

3. ^ The word space can be expanded or reduced. EL

Typeset the following lines as marked.

12/14 HE rom.

```
   199
 $4322
    38
     7
   256
  1200
```

MODULE IV

12. Selecting Word Space
13. Character Spacing
14. Using Reduced and Extra White Space
15. Setting Ragged Copy

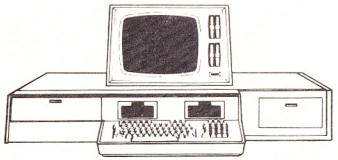
Itek

The Quadritek 1200

Operator Learning Program

MODULE IV

SELECTING WORD SPACE



INTRODUCTION

In the last section, *Setting Justified Composition,* you learned that after loading TOS the word space is set at 12 relative units. This provides maximum and minimum relative values of 24 and 6. This section will explain the use of other values of word space.

LEARNING GOALS

At the conclusion of this section, you will be able to:

1. Select *new values* of ideal word space.
2. Select minimum and maximum values for word *space expansion* or *reduction.*
3. *Cancel* word space values.

QUADRITEK CAPABILITIES

The Quadritek 1200 can:

- Use values of ideal word space, from 0 - 99 relative units, selected by the operator.
- Use values of minimum and maximum word space (reduction and expansion) selected by the operator.

How to Select Word Space

WHAT

The operator may wish to use reduced or expanded spaces that do not follow the basic rules or word space. The rule explained in Section 7 is, half of the ideal word space will be the minimum and twice the perfect space will equal the maximum.
The operator can select word space as follows:

- Ideal word space - 0 - 99 relative units
- minimum - equal to ideal, or smaller
- maximum - equal to ideal, or larger

WordSpace0
Word Space 6
Word Space 12
Word Space 18
Word Space 24
Word Space 30
Word Space 36
Word Space 99

HOW

How to change ideal, minimum, and maximum word space.

Ideal:
1. Press the COMMD key.
2. Key the mnemonic for "word space," "ws"
3. Enter two numbers, from 00 to 99.

ꞓws##

Minimum:
1. Press COMMD.
2. Key the "word space min" mnemonic, "wn".
3. Enter two numbers, equal to or less than the ideal word space.

ꞓwn##

Maximum:
1. Press COMMD.
2. Key the "word space max" mnemonic, "wx"
3. Enter two numbers, equal to or more than the ideal word space.

ꞓwx##

- These are beginning-of-line commands. and must be entered before any text.
- A word space command (ꞓws) automatically cancels any previous ꞓwx or ꞓwn values. The maximum word space is set to twice the ꞓws value and the minimum word space is set to one half the ꞓws value.
- Word space values are cancelled when a job is ended, the TOS program is loaded or reinitialized, or the values are changed.
- Minimum and maximum word space values do not appear on the VDT. It is a good idea to write the values on the job record sheet (see appendix).

Minimum Word Space
Optimum Word Space
Open Word Space

WORD SPACE

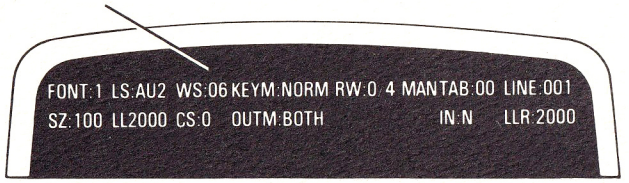
Action 1

Keyboard a word space value of 6 relative units.

CDws06

Feedback

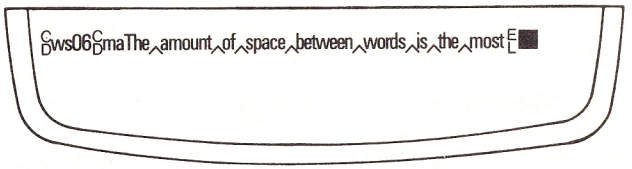
Verify that the new word space value is displayed in the format field (WS:06). This also changes minimum to 03 (half) and maximum to 12 (double).



Action 2

Keyboard the following information in manual line-ending and justify the line within the justification range.

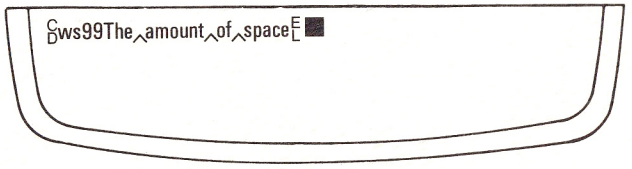
CDma The amount of space between words is the most if EL



Action 3

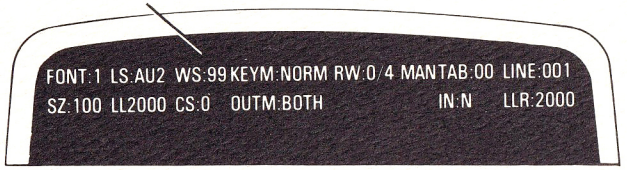
Keyboard the following with a word space of 99 relative units. Justify the line in the best possible place after the justification range "beep".

CDws99 The amount of space EL



Feedback

In Action 2 you were able to get more copy before the justification range because of the smaller word space. In this sample the word space is set to maximum so that every time the word space is keyboarded, before the justification range, it counts as 99 units.



Action 4

Keyboard a word space value of 10, a minimum value of 8, and a maximum value of 12 relative units.

CDws 10 CDwn 08 CDwx 12 The amount of space between words is the most EL

Feedback

Verify display of word space of 10 in the format field (WS:10). Word space expansion is now only from 10 to 12 relative units. Word space reduction is from 10 to 8 units. This gives only 5 units for expansion or reduction. This effect will provide good quality copy, but if the operator were to set several lines with this word spacing, he/she would find that overset occurs frequently. Note the minimum and maximum word space values *do not* appear on the VDT. It is a good practive to write those values on the *Job Record Sheet* See the (Appendix).

Action 5

End the job and process your copy.

$^{C}_{D}$ej$^{E}_{L}$

Feedback

Compare your copy with the examples to the right. Notice the difference in the inter-word spacing. Every line was set justified, after the justification range.

The amount of space between words is the most if
The amount of space
The amount of space between words is the most

EXERCISE/WORDSPACE

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

Design as applied to printed matter is the meaningful arrangement of elements on a page or other visuals in any area. This arrangement serves as an invisible scaffolding or framework on which to display meanings in print and picture.

Set the following copy justified in manual line ending. Follow the mark up and change the word spacing as indicated.

Man. Line ending

8/9

HE rom.

12□

```
                                                E
Design as applied to printed matterL
                                   E
is the meaningful arrangementL
                                                E
of elements on a page or other visualsL
                                                E
in any area.  This arrangement servesL
                                                E
as an invisible scaffolding or frame-L
                                              E
work on which to display meaningsL
                                E
in print and picture.P
```

WS25

WS06

WN04 WX08

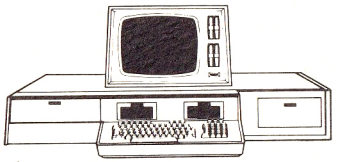
WS12

After you process your copy, note the difference in the inter-word spacing.

Exercise/Keystrokes

```
F1 §080 §090 L1200§maDesign as applied to printed matterE
§ws25 is the meaningful arrangement E
§ws06 of elements on a page or other visuals E
§wn04 §wx08 in any area. This arrangement serves E
§ws12 as an invisible scaffolding or frame-E
work on which to display meanings E
in print and picture. F §ejE
```

CHARACTER SPACING



QUADRITEK
QUADRITEK

INTRODUCTION

Character spacing can be used to distribute extra white space. Up to this point forced justification has only been produced by expanding the space between words. Some of that extra white space can also be put in a line by distributing it evenly between all the characters.

LEARNING GOALS

At the conclusion of this section you will be able to:

1. Select *character spacing* values.
2. Demonstrate how to use character spacing to *force justify* a line.

QUADRITEK CAPABILITIES

The Quadritek 1200 can:

- Use 0-9 relative units of character spacing. Extra character space is added only on lines that are set justified before reaching the justification range. If the selected character space has been added to each character and a line still requires more white space, the Quadritek will expand the word spaces to justify the line.

Character	Space	0
Character	Space	1
Character	Space	2
Character	Space	3
Character	Space	4
Character	Space	5
Character	Space	6
Character	Space	7
Character	Space	8
Character	Space	9

CHARACTER SPACING

WHY

When force justifying a line there may be too much white space between words. Some of this space may be placed between characters so that the line is easier to read.

HOW

To Select Character Spacing

1. Press the COMMD key.
2. Enter the mnemonics for "character spacing," "cs"
3. Enter a number from 0 - 9

C/D cs #

- Character spacing remains in effect until a new value is selected, the job is ended, or TOS is loaded or re-initialized.

NAME	KEYSTROKES	CANCELLED
Character Spacing	⁐cs#	New Value Initial Operating Values

CHARACTER SPACING

Action/Feedback

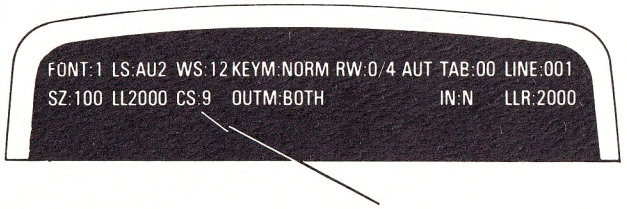
Action 1

Keyboard the following line with a character spacing value of 9. Make sure that the line is ended before the justification range, using the end-line key.

⁐cs9The entire appearance of ⁐

Feedback

Verify the display of character spacing of 9 in the format field (CS:9). This indicates that a maximum of 9 relative units will be inserted between each character to justify the line. This is in addition to word space expansion.



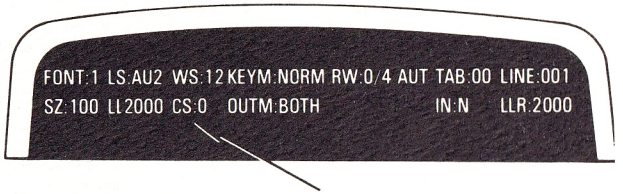
Action 2

Set the line again using first a value of 3 and then a value of 0.

⁐cs3 The entire appearance of ⁐
⁐cs0The entire appearance of ⁐

Feedback

Verify display of CS:0 in the format field.



Action 3

Process your copy and compare the output with the examples.

⁐ej ⁐

Feedback

Compare the output and verify the effect of each value of character space. If there appears to be no difference, go back and re-do the examples. Make sure the lines are ended before the justification range.

The entire appearance of
The entire appearance of
The entire appearance of

Character Spacing/Exercise

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

To many people, many type faces look alike; even an expert must look carefully to differentiate between them. While there is no short cut to learning how to identify type faces, careful study of a few key letters helps.

Typeset the following paragraph of text, line for line, in manual line-ending. Follow the mark up. Force justify each line using the character spacing indicated.

The term "line for line" means to typeset each line exactly as it is shown on the manuscript. This means that the paragraph should be set justified, but the typesetter must end the lines where they end on the manuscript.

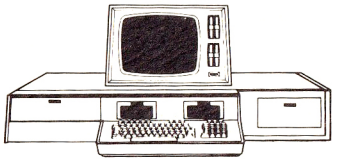
HE rom. 12/14 20□ (Line/Line)

CS9 To many people, many type
faces look alike; even an expert
CS4 must look carefully to differentiate
between them. While there is no
CSØ short cut to learning how to identify
type faces, careful study of a few
key letters helps.

Exercise Keystrokes

F1 §120 §140 L2000 §ma §cs 9 To many people, many type
faces look alike; even an expert
§cs4 must look carefully to differentiate
between them. While there is no
§cs0 short cut learning how to identify
type faces, careful study of a few
key letters helps.
§ej

USING REDUCED AND EXTRA WHITE SPACE



INTRODUCTION

Sometimes it is necessary to set a word, a line, or several lines with the space between characters reduced or expanded. Reduced white space in a line can be used to prevent the undesired hyphenation of a proper noun. A WIDOW — a single word or part of a word that doesn't fit and must be carried over to a new page or line—may be fit into the previous line if the white space in that line is reduced. Extra white space is often used to make headlines easier to read. The white space is added to or subtracted from the space between characters.

widow.
A solidary word or part of a word that has been carried over from a previous page, paragraph, etc.

LEARNING GOALS

At the conclusion of this section you will be able to:

1. Select and use *reduced white space.*
2. Select and use *extra white space.*

QUADRITEK CAPABILITIES

The Quadritek 1200 can:

- Reduce the standard character spacing by ¼ relative units. Maximum reduction is 9/4 units.
- Expand the standard character spacing by ¼ relative units. Maximum expansion is 9/4 units.

The effect of white space.
Normal

The effect of white space.
Reduce White Space

The effect of white space.
Extra White Space

REDUCE WHITE SPACE

WHY

Widow or overset characters can be made to fit on a line, by using reduced white space. It can also be used to tighten up copy. This is usually necessary with larger type sizes, where the white space between characters appears to be greater.

HOW

How to reduce the white space between characters:

1. Press the COMMD key.
2. Enter the mnemonic for "reduce white space," "rw"

Reduce White 0
Reduce White 1
Reduce White 2
Reduce White 3
Reduce White 4
Reduce White 5
Reduce White 6
Reduce White 7
Reduce White 8
Reduce White 9

3. Enter a number from 1 - 9, the number of quarter relative units of reduction

$^{C}_{D}$rw(#1-9)

- The initial TOS value is RW:0/4.
  This is shown in the top line of the VDT format field.
- White space can be reduced in any part of a line and therefore the reduce-white command can be given anywhere in a line. (However, in most cases it is selected at the beginning of a line.)
- White space reductions remain in effect until a new value is entered, the initial operating values are returned, or RW:0 is entered.

EXTRA WHITE SPACE

WHY

Extra white space can be used to fill up more of the line length and to make some kinds of type easier to read.

How to add extra white space between characters.

1. Press the COMMD key.
2. Enter the mnemonic for "extra white space," "ew"
3. Enter a number from 1-9, the number of quarter relative units of extra space.

$^{C}_{D}$ew(#1-9)

- Extra space can be added in any part of a line and therefore the extra-white command can be entered any time.
- White space additions remain in effect until a new value is entered or the initial operating values are returned. (An entry of $^{C}_{D}$rwo or $^{C}_{D}$ewo can be used).

Name	Keystrokes	Cancelled
Reduce White Space	$^{C}_{D}$rw#	New Value, End Job
Extra White Space	$^{C}_{D}$ew#	New Value End Job

Extra White 3
Extra White 4
Extra White 5
Extra White 6
Extra White 7
Extra White 8
Extra White 9

REVIEW

1. Reduced white space tightens the characters within a line by reducing the s _____ b _____ characters.
2. Extra white space increases the s _____ b _____ characters in a line.
3. This horizontal space is reduced or expanded in _____ (fraction) relative units.
4. A reduce-white-space of 3/4 shows on the Video Display Terminal. This is a reduction of _____ (fraction) of a r _____ u _____ .
5. The maximum reduce-white-space or extra-white-space that can be keyboarded is _____ relative units.
6. The command for reduce-white-space is _____ .
7. The command for extra-white-space is _____ .

ANSWERS

1. space between
2. space between
3. 1/4
4. 3/4, relative unit
5. 9/4 or (2¼)
6. Grw (single digit 1-9)
7. Gew (single digit 1-9)

REDUCE AND EXTRA WHITE SPACE

ACTION/FEEDBACK

Action 1

Typeset the following line as shown with a line length of 19½ picas and manual line ending.

§120⊢1906Gma The appearance of a printed piece can be

Feedback

Verify that you are now in an overset condition.

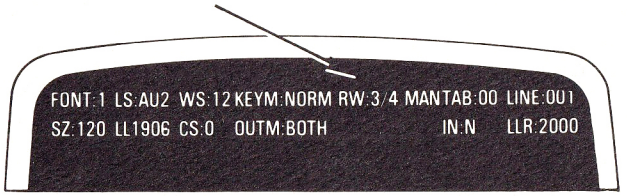
Action 2

Move the cursor to the beginning of the line, insert a reduce-white of 3, and then press the EOC key. Complete the line with end-line command.

(insert) Grw3§120⊢1906Gma The appearance of a printed piece can be⊢

Feedback

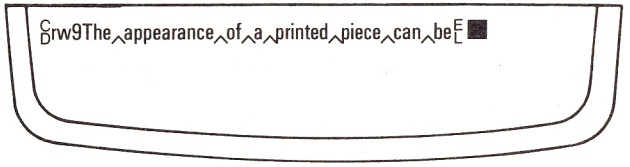
Verify that the format field shows RW:3/4. (The "4" indicates quarter units) By taking 3/4 of a relative unit from between all characters, the overset character can now fit on the line.



Action 3

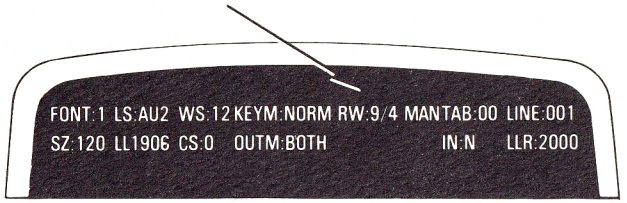
Typeset the same line with a reduce white of 9 relative units.

CDrw9 The appearance of a printed piece can beEL



Feedback

Verify display of reduce-white of 9 in the format field (RW:9/4). When you process your copy you'll notice that the characters in this line are just about touching. When working in a smaller point size, it is possible to reduce white space too much, as in this example.



Action 4

Cancel the reduce-white. Change to 11 point and keyboard the following:

CDrw0SZ110 CLASSIFICATION OF TYPE FACES

Feedback

Notice the line-length remaining.

Action 5

Move the cursor to the "C" in CLASSIFICATION. Insert an extra-white of 3/4, press the EOC key, note the LLR, and then end the line.

CDrw0SZ110(Insert)CDew3CLASSIFICATION OF TYPE FACESEL

Feedback

Notice how the extra-white decreased the line length remaining. Three quarters of a unit was placed between all characters. This function can be used to force justify a line.

Action 6

End-job, process and compare copy.

CDejEL

Feedback

Verify that the VDT entry is RW:04. Compare your copy with the example.

The appearance of a printed piece can be
The appearance of a printed piece can be
CLASSIFICATION OF TYPE

Exercise/Reduce and Extra White Space

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

TYPE AND TYPESETTING

Printing can be defined as the reproduction, in quantitiy of words and pictures on a page. In the photomechanical processes such as offset, any original camera-ready material to be printed is referred to as "copy" by the printer. Copy consists of all material to be reproduced in text or picture form. The term can be confusing, however; because "copy" is also used to refer to manuscript copy, which is the author's manuscript to be set in type.

Tips for Setting this Exercise

1. Extra or reduce white space commands stay in effect until cancelled. When this function is used to make a line fit, cancel it at the beginning of the next line. This function is cancelled by a zero value.
2. The maximum you can reduce or add white space is determined by the type style and the type size. As you use extra and reduced white space, make a note of the maximums for particular sizes and styles.

3. Finding the correct amount of white space is primarily an experimental process. The object is to find a value that will provide the least amount of remaining line length yet not give overset characters. Several values may be entered before the proper balance is found for a line of type.

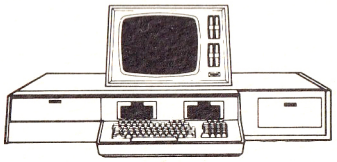
Printing can be defined as the reproduction, in quantity of words and pictures on a page. In the photomechanical processes such as offset, any original camera-ready material to be printed is referred to as "copy" by the printer. Copy consists of all material to be reproduced in text or picture form. The term can be confusing, however; because "copy" is also used to refer to manuscript copy, which is the author's manuscript to be set in type.

Exercises/Keystrokes

F3S090L100L1300CmaTYPE AND TYPESETTINGC
F1Cew9Print can be defined as theE
Cew0reproduction, in quantity of wordsE
Cew9and pictures on a page. In theE
Crw4photomechanical processes such asE

Cew5offset, any original camera-readyE
Crw4material to be printed is referred to asE
Crw1"copy" by the printer. Copy consistsE
Crw5of all material to be reproduced in textE
Crw3or picture form. The term can be con-E
Cew1fusing, however, because" copy" isE
Crw5also used to refer to manuscript copyE
Cew8which is the author's manuscriptE
Cew0to be set in type.E
CejE

SETTING RAGGED COPY



INTRODUCTION

Ragged type has lines of type that are not justified. One or both margins will be uneven. In ragged type the word spaces are equal in value and the remaining blank space is put at the ends of the lines.

LEARNING GOALS

At the end of this section you will be able to:

1. Set *ragged right, ragged left,* and *ragged both* (centered) copy.
2. Change word spacing to *increase* or *decrease* the ragged effect.

QUADRITEK CAPABILITIES

The Quadritek 1200 can typeset:

- Ragged right - where type begins on the left margin and the right margin is ragged.
- Ragged left - where type always ends on the right margin and the left margin is ragged.
- Ragged both (centered) - where type is always centered on the line with both margins ragged.

Ragged right copy is prepared and looks like this with all the word spaces an equal value.

HOW TO SELECT THE RAGGED MODES

To set ragged right or ragged left type:

1. Press COMMD
2. Enter the mnemonic for "ragged right" or "left," "rr" or "rl".

$^{C}_{D}$rr or $^{C}_{D}$rl

To set ragged both (centered) type:

1. Press COMMD
2. Enter the "ragged right" mnemonic, "rr"
3. Press COMMD
4. Enter the "ragged left" mnemonic, "rl"

$^{C}_{D}$rr$^{C}_{D}$rl

HOW TO CANCEL RAGGED MODES

1. Press COMMD
2. Enter the mnemonic for "cancel ragged," "xr"

Name	*Mnemonics*	*Cancel Code*
Ragged Right	CDrr	CDxr
Ragged left	CDrl	CDxr
Ragged Both	CDrrCDrl	CDxr

- Ragged commands are beginning- of- line commands and must precede text.
- Ragged commands remain in effect until the cancel ragged command is given or the initial operating values are returned.
- Ragged commands override the LEFT, CTR, RIGHT, END PARAG, and END LINE keys. Text will be set as indicated by the ragged command.
- In ragged modes, the effects of all end-line commands are overriden. The end-line command will not justify a line.

HOW TO INCREASE THE RAGGED EFFECT

WHY

The Quadritek is programmed to expand or reduce word spaces and this still occurs in ragged modes. In some cases this decreases the ragged effect and some typeset copy may appear to be justified. To increase the ragged effect the maximum and minimum word space should be changed.

HOW

To increase the ragged effect:

1. Set the minimum word space equal to the ideal word space.

   Min = ideal

2. Set the maximum word space to 3 times the ideal word space.

   Max = 3x ideal

For example: If the VDT shows WS: 12, enter CDwn12 (minimum word space = ideal word space), and CDwx36 (maximum word space = 3x ideal) When cancelling the ragged mode the operator must return the minimum and maximum word space values.

Minimum = ½ ideal Maximum = 2 x ideal

Why Ragged Modes?

Why would, for example, ragged-right mode be used instead of just ending each line with a "left" command? The application of ragged modes comes primarily when information is to be recorded for future use. If a paragraph is recorded with each line followed by an end-line (E) command, the data can later be played back in the ragged mode or the ragged command could be deleted and the paragraph typeset justified. If the left command (L) was used to end lines the data could not be re-played and set justified without reading a line at a time and changing the "lefts" to "end-lines."

REVIEW

1. When type begins at the left margin and ends at different places at the right, it is called r _____ r _____ copy.
2. The command to set ragged right copy is _____ .
3. The command to set "ragged both" is _____ .
4. Ragged commands are b _____ of l _____ commands.
5. In the ragged modes all of the e _____ l _____ c _____ are overridden.
6. To increase the ragged effect the minimum word space is set _____ and the maximum is set _____ .
7. To cancel the ragged mode _____ is keyboarded.
8. When cancelling the ragged mode, the minimum word space should be r _____ to _____ and the maximum word space should be r _____ to _____ .

ANSWERS

1. ragged right
2. Grr
3. Grr Grl
4. beginning, line
5. end-line, commands
6. equal to the ideal, 3x ideal
7. Gxr
8. returned, ½ ideal, returned, 2x ideal

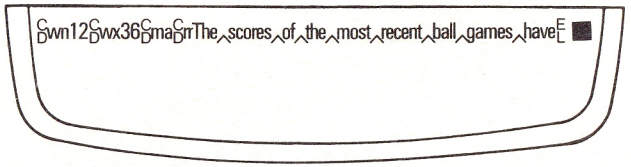
SETTING RAGGED COPY

Action/Feedback

Action 1

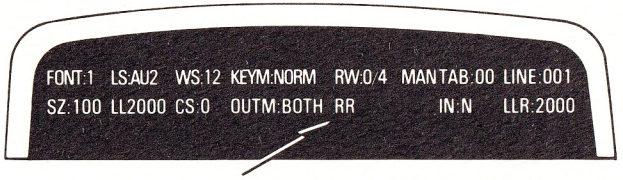
Keyboard the commands to change minimum and maximum word space. Change to manual line-ending and ragged right.

Gwn12 Gwx36 Gma Grr The scores of the most recent ball games have E



Feedback

Verify that in the format field's second line, to the right of OUTM: BOTH, the letters RR are present, for "Ragged Right". All copy will be set this way until a new mode is entered. Because the ragged right mode is in effect, the end-line command will not justify the line. Also, notice that the word spacing changes do *not* appear in the format field.



Action 2

Continue setting the following ragged right copy.

been attributed to a new livelier ball. The E
manufacturer, however, states there is no E
difference between this year's process and last R
year's manufacturing process. C

Feedback

All of the lines will be typeset flush left. The ragged command overrides any end-line command.

Action 3

Cancel the ragged right mode, then enter the command for ragged left. Typeset the following:

C D xr C D rl Most recent trends have proven that the life E
expectancy of a female is at least 8 years E
longer than males. This assumes equal care E

Feedback

Verify entry into ragged left mode by display of "RL" in the format field. This replaced the "RR" from the previous example.

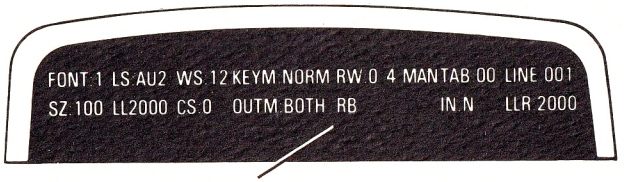
Action 4

Now keyboard the command for ragged both (The ragged left command has already been entered):

C D rr You are cordially invited E
to attend the graduation E
of John Johnson, Esquire E

Feedback

Verify entry into ragged both by an "RB" in the format field. It was not necessary to cancel the ragged left command because it was used with the ragged right to build a ragged both.



Action 5

Keyboard the following line, using flush right to end the line.

R.S.V.P.RT

Feedback

When a ragged mode is in effect all end-of-lines are overridden. On this line, even though a flush right was keyboarded, it will be centered because the ragged-both is in effect.

Action 6

Cancel the ragged mode and typeset the following ending with a flush right.

CDxr at 7:30 P.M. in Johnson Hall.RT

Action 7

End-job and process your work.

CDejEL

Feedback

Compare your work with the examples. If they do not match re-keyboard them.

The scores of the most recent ball games have been attributed to a new livelier ball. The manufacturer, however, states there is no difference between this year's process and last year's manufacturing process.

Most recent trends have proven that the life expectancy of a female is at least 8 years longer than males. This assumes equal care

You are cordially invited
to attend the graduation
of John Johnson. Esquire
R.S.V.P.
at 7:30 P.M. in Johnson Hall.

Exercise/Ragged Copy

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

Ragged right copy is copy that is set flush against the left margin, with the interword spaces all of equal value, which causes the right margin to be ragged. **Ragged right** copy can be set in the automatic or manual line-ending mode. While you are in the **ragged right** mode all of your end-line keys are overridden. To use any other end-line decision, you must cancel the **ragged right** command.

Ragged left copy is copy that is set flush against the right margin, with the interword spaces all of equal value, which causes the left margin to be ragged. **Ragged left** copy can be set in the automatic or manual line-ending mode. While you are in the **ragged left** mode all of your end-line keys are overridden. To use any other end-line decision, you must first cancel the **ragged left** command.

Ragged both (centered) copy is copy that is set so that it always ends and begins the same distance from the left and right margin, with the interword spaces all of equal value, which causes both the left and right margin to be ragged. Ragged both (centered) copy can be set in the automatic or manual line-ending mode. While you are in the ragged both (centered) mode, all of your end-line keys are overridden. To use any other end-line decision, you must first cancel the ragged both (centered) command.

Tips for Setting this Exercise

1. Enter the ragged command on the same line you make your font, size, line space, and line length changes.
2. Use an extra end-of-line (preferably an§) between paragraphs to get extra white space. It is best to use the end-paragraph when recording on cassettes because later use of the tape may result in stripping of end-line commands changing, the extra line space to only word spaces
3. Use automatic line-ending and type each paragraph as one long line. Use any end-of-line command after typing the last word. The Quadritek 1200 will make the end-line decisions.
4. Don't forget to change the minimum and maximum word spacing.

Typeset the following paragraphs using raggeds as marked.

8/9 14 □ HE rom.

Ragged right copy is copy that is set flush against the left margin, with the interword spaces all of equal value, which causes the right margin to be ragged. Ragged right copy can be set in the automatic or manual line-ending mode. While you are in the ragged right mode all of your end-line keys are over-ridden. To use any other end-line decision, you must cancel the ragged right command.

10/12 22□ HE rom.

Ragged left copy is copy that is set flush against the right margin, with the interword spaces all of equal value, which causes the left margin to be ragged. Ragged left copy can be set in the automatic or manual line-ending mode. While you are in the ragged left mode all of your end-line keys are overridden. To use any other end-line decision, you must first cancel the ragged left command.

6/8 10□ HE ital.

Ragged both (centered) copy is copy that is set so that it always ends and begins the same distance from the left and right margin, with the inter word space all of equal value, which causes both the left and right margin to be ragged. Ragged both (centered) copy can be set in the automatic or manual line-ending mode. While you are in the ragged both (centered) mode, all of your end-line keys are overridden. To use any other end-line decision, you must first cancel the ragged both (centered) command.

Exercise/Keystrokes

Gej£

f3 §080 §090 ↳1400 Gr Gwn12 Gwx36 Ragged right
f1 copy is . . . f3ragged rightf1command.f£
f3 §100 §120 ↳2200 Gr1 Ragged left f1copy is . . .
f3 Ragged left f1command.f£
f2 §060 §080 ↳1000 Ragged both . . . (centered) command.f

MODULE VI

17. Extra and Reduced space Between Selected Lines
18. How to Use Indents
19. Tabular/Colmnar Modes

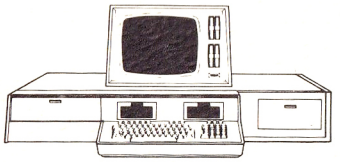
Itek

The Quadritek 1200

Operator Learning Program

MODULE VI

EXTRA AND REDUCED SPACE BETWEEN SELECTED LINES



INTRODUCTION

To make some typeset copy easier to read it is necessary to expand or reduce the space between certain lines. For example, extra space may be needed between paragraphs or between a headline and the copy below it.

Sometimes it is necessary to reduce space between selected lines. This is done when underscoring a line.

The use of superior or inferior characters may also make extra or reduced line space necessary.

Underscoring a line.

The equivalent Journal[3] is available

LEARNING GOALS

At the end of this section you will be able to:

1. *Add extra space* between two lines without changing the basic line spacing you've selected for the copy.
2. *Reduce line space* between two lines of copy without changing the basic line space used in the remainder of the copy.

QUADRITEK CAPABILITIES

The Quadritek 1200 can:

- Add extra space between two lines, or parts of lines, in 1/10 point steps, to a maximum of 99.9 points.
- Reduce the space between two lines or parts of lines, in 1/10 point steps, to a maximum of 99.9 points.

EXTRA & REDUCED LINE SPACE

WHY

Extra or reduced line space is used to accommodate superior and inferior characters, to provide proper space when a line is underscored, and for special effects.

HOW

To obtain extra or reduced line space:

1. Press the COMMD key.
2. Enter the mnemonic for "extra space," "es" *or* the mnemonic for "reduce space," "rs"
3. Keyboard a 3 digit number, two for points and one for tenths of a point.

$\underset{\text{D}}{\text{C}}$es (###) or $\underset{\text{D}}{\text{C}}$rs (###)

- These commands take effect immediately.

Note: In automatic line-ending mode, end-of-line commands can be repositioned by the Quadritek. Therefore, care must be taken when using the extra and reduce-space commands, particularly near the end of a line measure.

NAME	KEYSTROKES	CANCELLED
Extra Space	$\underset{\text{D}}{\text{C}}$es###	Self
Reduce Space	$\underset{\text{D}}{\text{C}}$rs###	Self

REVIEW

1. What is the maximum amount of extra or reverse line spacing which can be used? _____
2. In what increments is it variable? _____
3. Give the keystrokes needed to enter 27 points of extra line spacing. _____

_____

_____

ANSWERS

1. 99.9 points
2. .1 of a point increments
3. Depress the command key followed by "es" followed by 270 for 27 points and no tenth points. ($\underset{\text{D}}{\text{C}}$es270)

4. Give the keystrokes needed to enter 99.3 points of reverse line spacing. _____

_____

_____

5. The extra line spacing and reverse line spacing commands can be used _____ in a line and execute immediately.

4. Depress the command key followed by "rs" followed by 993 for 99 points and 3 tenths point.
5. anywhere

EXTRA AND REDUCE SPACE BETWEEN LINES

Action Feedback

Action 1

Keyboard the following lines of copy using 6 points of extra space between the heading and the text:

F 3 S 120 L 120 EXTRA SPACE C

F 1 S 100 C es060 Extra space is commonly used to separate headings from text, and between paragraphs. E

F3S120L120EXTRA^SPACEC
F1S100Ces060Extra^space^is^commonly^used^to^separateE

headings^from^text,^and^between^paragraphs.E

Feedback

Verifty that the VDT shows that basic line space is 12.0 points. The distance from the baseline of the first line to the second line will be 18 points. The 18 points equals the line space of 12.0 plus the extra space of 6.0 points.

Action 2

Keyboard the following information. After setting the first line reduce the line space 10 points and underscore the first word:

The ability to underscore a line, using the ruling E

C rs100 C br C br L

feature, gives added emphasis. E

The^ability^to^underscore^a^line,^using^the^rulingE
Crs100Cbr L

feature,^gives^added^emphasis.E

Feedback

The first line has been typeset with the standard line space. The underscore will be 2 points (12.0 - 10.0 = 2.0) below the baseline and the next line will be typeset the standard line space value that is displayed on the VDT.

Action 3

Reduced and extra line space can be used within a line to set inferior and superior numerals. Keyboard the following example:

H$^{C}_{D}$es040 2 $^{C}_{D}$rs040 O$^{C}_{T}$

Feedback

Using extra and reverse line space within a line allows the operator to typeset inferior and superior characters.

Note: If the typesetter is reverse or extra spaced to set a superior or inferior character, the operator must tell the typesetter to return to the baseline by extra or reverse space.

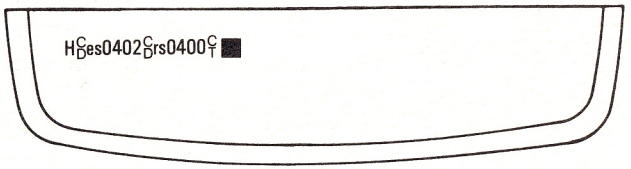
Action 4

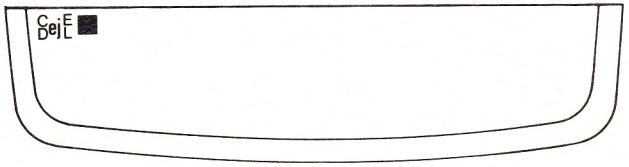
Process your copy and compare your output with the example.

$^{C}_{D}$ej$^{E}_{L}$

Feedback

If the examples match move to the review exercise. If they do not match re-do the examples.





EXTRA SPACE

Extra space is commonly used to separate headings from text, and between paragraphs. The ability to underscore a line, using the ruling feature, gives added emphasis.

H_2O

Exercise/Reduced and Extra Line Space

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving ajob. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

HOLIDAY
★ SPECIAL ★

Your Choice **$99** Limited Quantity

✓ *Chairs*
✓ *Swivel Rockers*
✓ *Accent Chairs*

Traditional, Colonial and *Modern* styles in elegant *Velvets, Rugged Tweeds,* and *Textured Fabrics* in these and several other styles not shown here. Buy one or a pair tomorrow and we'll deliver to you before the holidays.

—ALSO—

Coffee Tables	$ 99.50
Glass Top Dining Tables	199.99
Magazine Racks	9.99

½ mark down on many other items!

Tips for Setting this Exercise

1. To get the stars above the baseline of "SPECIAL," reduce the line space 14 points.
2. To get copy flush left and flush right on the same line, use the end-line key.
3. To get $99 on the same baseline as "choice" and "Quantity," reduce line space 12 points. This will put you back on the same baseline.
4. Use figure spaces to get the figures to align.

The following exercise is a review of all functions that have been covered to this point. For help, refer to the procedures in each section.

21□

36/36 ★ HOLIDAY SPECIAL ★ HE bold stars above 14' "SPECIAL"

+36'

12/12 HE rom. Your Choice $99 Limited Quantity

+24'

14/17 ✓Chairs ✓Swivel Rockers ✓Accent Chairs HE ital.

+24'

10/12 HE rom. Traditional, Colonial and Modern styles in elegant Velvets, Rugged Tweeds, and Textured Fabrics in these and several other styles not shown here. Buy one or a pair tomorrow and we'll deliver to you before the holidays. ital.

+12'

-ALSO-

+3'

Coffee Tables	$ 99.50
Glass Top Dining Tables	199.99
Magazine Racks	9.99

+6'

10' HE 1/2 mark down on many other items!

REDUCED AND EXTRA SPACE KEYSTROKES

F3 S360 L360 L2100 HOLIDAYC

SPECIALC

Crs500 Cst^ Cst^E

Ces360F1S120L120Your^LimitedE

Choice^QuantityE

Crs120S360F3$99C

Ces240F1S140L170Cck^F2ChairsC

F1Cck^F2Swivel^RockersC

F1Cck^F2Accent^ChairsC

Ces240F2S100L120Traditional,^Colonial^F1and^F2
Modern^F1styles^in...holidays.E

E

F2S140CmdALSOCmdC

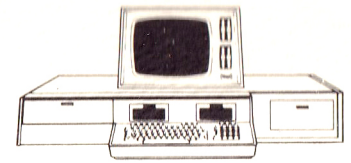
F1S100L120Ces030CoffeeETables^$E99.50E

GlassETopEDiningETables^E199.99E

MagazineERacks^EEE9.99E

Ces060C12^mark^down^on^many^other^items!C

HOW TO USE INDENTS



INTRODUCTION

Typesetting jobs often follow a form where items must be indented from the left, right, or both margins. This section explains how the Quadritek stores and uses indents.

LEARNING GOALS

At the conclusion of this section you will be able to:

1. Set and use 4 *left indents.*
2. Set 1 *right indent.*
3. Set a *combination* of 1 left indent and the right indent.
4. *Cancel* indents.

QUADRITEK CAPABILITIES

The Quadritek 1200 can store in the memory of the mini-computer, for use anytime:

- 4 left indents, measured in picas and points.
- 1 right indent, measured in picas and points.
- A combination indent, consisting of any one of the left indents and the right indent.

The initial operating values shown on the Quadritek VDT, include IN: N (Indents: NONE)

The Investment Tax Broker has reached a new high in terms of career potential within private industry. Listed below:

Catagories to be outlined are listed below and include:

- Manufacturing
- Retail
- Service Organizations

Other items to be discussed are listed under subtitles:

- Electronics
- Steel Industry
- Unions
- Auto Industry—including major divisions of same.

*Footnotes — annotated for case and Doc. Number (#).

The nature of this study is confidential. For the sole use of the Reader.

HOW TO STORE INDENTS

WHY

Before an indent can be used, its value in picas and points must be stored for reference by the Quadritek.

HOW

To Store Indents:

1. Press the COMMD key.

2. Enter the mnemonic that represents the indent.
   a. Store left indent: sl1, sl2, sl3, sl4.
   b. Store right indent: sr (No number is needed because there is only one right indent.)
3. Keyboard a four digit value representing the pica and point value of the indent. The first two numbers represent picas and the second two numbers are points.

   Example: The keyboard entry to store the first left indent, 3 picas and 6 points from the left margin is: $^{C}_{D}$sl10306

- Left indent number 1 is measured from the left margin. Indent number 2 is measured from indent number 1, #3 is measured from #2, and #4 is measured from #3.
- The right indent is measured from the right margin.
- Indents can be stored at anytime, anywhere within a line.

STORE INDENTS	MEASURED FROM
$^{C}_{D}$sl1	Left Margin
$^{C}_{D}$sl2	sl1
$^{C}_{D}$sl3	sl2
$^{C}_{D}$sl4	sl3
$^{C}_{D}$sr	Right Margin

HOW TO USE INDENTS

To indent:

1. Press the COMMD key.
2. Enter the mnemonic that represents the desired indent.
   a. Indent, left: il1, il2, il3, or il4.
   b. Indent, right: ir (No number is needed. There is only one right indent.)
   c. Combination: il - ir

For Example: To indent from both margins using the right indent and the second left indent, the keyboard command would be ⁐il2 ⁐ir.

- The "use indents" command may be entered anywhere in a line. The command will not affect the line in which it appears but the indent will be set beginning with the next line.
- A "use" command may be entered in the same line as the "store" command for that indent.
- An indent remains in effect until the operator selects another, TOS is loaded or re-initialized, or the command to cancel the indent is given.

CANCELLING INDENTS

WHY

The typesetter may wish to indent a portion of a job, return to full margins, and the indent. The "cancel indents" command allows the operator to stop indenting and return to full margins, leaving the indent values stored for later use.

HOW

To cancel indents (stop indenting):

1. Press the COMMD key.
2. Enter the mnemonic for "cancel indents," "xi"

⁐xi

- An indent or indent combination, used in tab or column mode, will automatically cancel when moving to the next tab. The left, right, or center commands cancel indents in the tabular mode and the column-next command cancels them in columnar mode.

USE INDENTS	MEASURED FROM	CANCELLED
CDil1	Left Margin	
CDil2	sl1	
CDil3	sl2	CDxi
CDil4	sl3	
CDir	Right Margin	
CDilxCDir	Left margin or preceeding indent, right margin	

REVIEW

1. The Quadritek 1200 can set _____ indents from the left margin and _____ indent from the right. A "combined indent" uses indentations from both _____ at the same time.

2. Write the commands for setting the indents used in the following copy.

   A. _____

   B. _____

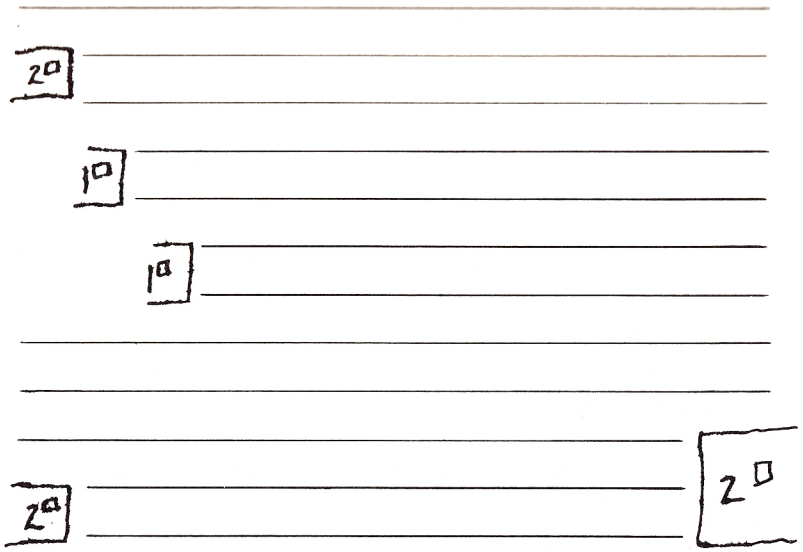
   C. _____

   D. _____

ANSWERS

1. four
   one
   margins

2. CDsl1 0200
   CDsl2 0100
   CDsl3 0100
   CDsr 0200



SETTING INDENTS

Action/Feedback

To the right is a sample of the copy that you will be typesetting in this sequence of Action/Feedbacks.

Action 1

Change to the manual line-ending and ragged right modes. Store the following indents in memory:

Feedback

Not all indents must be stored at the same time. Storing them *does not* advance the photographic material. The store-indent line is then followed by an end-of-line command to send the information to the output field and into memory for later use. Indents can be *stored* and *used* in the same line.

The investment tax broker has reached a new high in terms of career potential within private industry. Listed below:

Categories to be outlined are listed below and include:

- Manufacturing
- Retail
- Service Organizations

Other items to be discussed are listed under subtitles:

- Electronics
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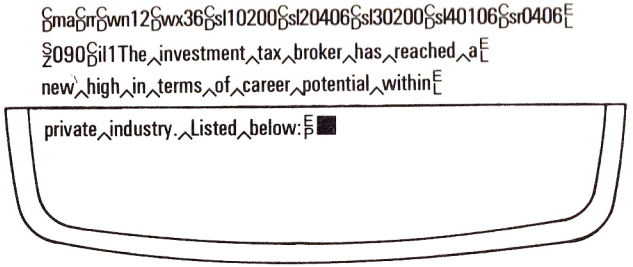
Action 2

Set the following, using indent-left:

§090Cil1The investment tax broker has reached aE

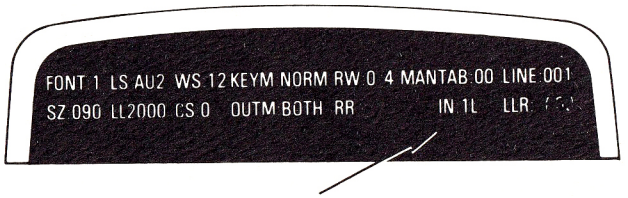
new high in terms of career potential withinE

private industry. Listed below:EP



Feedback

Verify entry into indent-left 1 in the format field. The characters IN:1L will be displayed on the second line. The indent will remain in effect until it is cancelled or a new indent is called. Also notice that LLR in the format field shows the line length *minus* the indent in use.



Action 3

Set the following example using the indents called for:

Cil2Categories to be outlined are listedE

below and include:EP

Cil3CbuEManufacturingE

CbuERetailE

CbuEService OrganizationsE

Cil1Other items to be discussed are listedE

under subtitles:EP

Cil4CbuEElectronicsEP

CbuESteel IndustryEP

CbuEUnionsEP

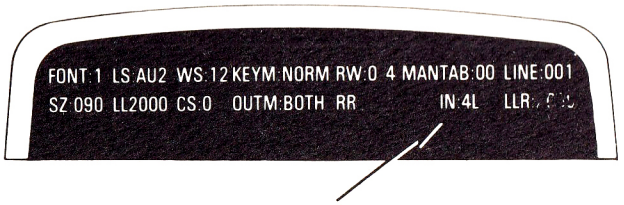
CbuEAuto IndustryCmdE

including major divisionsE

of sameEP

Feedback

Verify entry into indent-left 4. The characters IN: 4L are displayed in the format field. Indents can be used at *random*, except when they are combined with the right indent.



Action 4

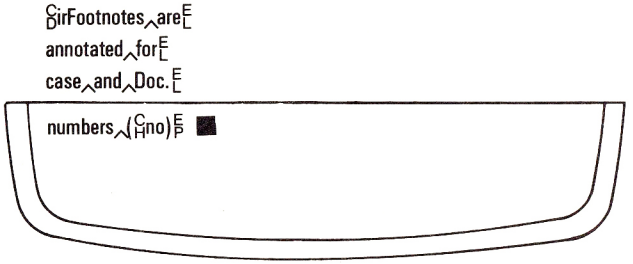
Set the following, using a combination indent of il4 -(now in use) and the ir. The indent- right command is the only command to be keyboarded because il4 is already in use (as indicated by the VDT).

ir Footnotes are

annotated for

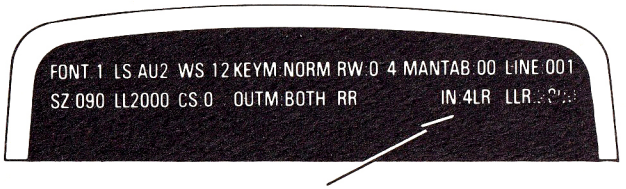
case and Doc.

numbers (no)



Feedback

Verify entry into the combination indent. The characters "IN:4LR" will now be displayed in the format field. The LLR will again reflect the actual line length remaining, minus the indents in use.



Action 5

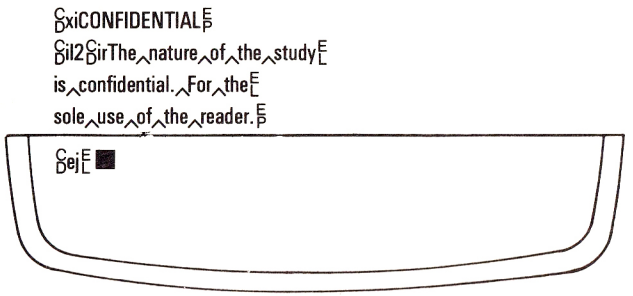
Cancel the indent and keyboard the following:

xiCONFIDENTIAL

il2irThe nature of the study

is confidential. For the

sole use of the reader.



Feedback

Verify entry of the new combination in the format field. (IN:2LR). The new LLR should reflect the line length minus the two indents.

Action 6

Develop the typeset material.

ej

Feedback

Compare your copy with the examples before going on to the review.

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Exercise/Indents

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

Preserving Mammals

Tools and Supplies

Although specimens of mammals can be prepared adequately with only a knife or a pair of scissors, a few inexpensive tools and supplies make the job easier and faster. Some of these items are:

- Small sharp knife or scalpel.
- Two pair of scissors.
  - (one small and sharp pointed for cutting skin).
  - (the other somewhat larger and stronger for cutting bone).
- Sharp pointed forceps.
  - (4 to 6 inches long).
- Pliers with a cutting edge.
  - (linesman's type).
- Pins.
- Needles and thread.
- Labels.
  - (Made of tough, waterproof paper. Labels will be supplied upon request if the specimens are to be collected for the National Museum).

Preparing Labels

Labels should be made of a good grade of heavy, completely waterproof paper. If the standard museum labels are not available, test the paper to be used by soaking it for several hours in warm water.

Tips for Using this Exercise:

1. It is a good idea to look through a job before typesetting to see how any indents are required and how big each indent should be.
2. Indents are measured from the previous one, so when setting indents the one closest to the left margin will be number 1, the next closest will be number 2, and so on. Do not set indents according to the order that you are going to use them.

Typeset the following, according to the mark up instruction.

30□ BOLD Preserving Mammals [16' +8'

Tools and Supplies □4' ital. +4'

1 1/2 pica indent 12' rom

Although specimens of mannals can be prepared adequately with only a knife or a pair of scissors, a few inexpensive tools and supplies make the job easier and faster. Some of these items are:

1½□ (2) Small sharp knife or scalp + 2'

1½□ (1) Two pairs of scissors +2

10□ (3) (One small and sharp pointed for cutting skin). [5□ right INDENT

10□ (4) (the other somewhat larger and stronger for cutting bone). + 1' [5□ right INDENT

(5) Sharp pointed forceps. + 2'

(4 to 6 inches long)

(2) Pliers with a cutting edge

(lineman's type)

(1) Pins + 2'

(1) Needles and thread + 2'

(2) Labels. + 2'

(3) (made of tough, waterproof paper. Labels will be supplied upon request if the specimens are to be collected for the National Museum). [5□ right INDENT

Preparing Labels □4' Italic +4 + 8

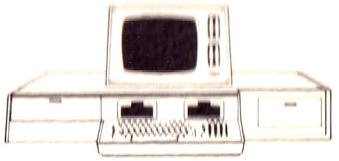
12' rom 1½'

Labels should be made of a good grade of heavy, completely waterproof paper. If standard museum labels are not available, test the paper to be used by soaking it for several hours in warm water.

FT 1 = HE55
FT 2 = HE56
FT 3 = HE65

1. ⌐3⌠160⌡au2└3000⌠sl10106⌠sl20106⌠sl30100⌠sl40100
   ⌠sr0500⌐
2. Preserving Mammals⌐
3. ⌠es080⌠140⌐2Tools and Supplies└
4. ⌠es040⌠120⌐1⌠il1 Although specimens of mammals can be
   prepared ade-⌐
5. quately with only a knife or a pair of scissors, a few⌐
6. inexpensive tools and supplies make the job easier and⌐
7. faster. Some of these items are:└
8. ⌠es020⌠il2 Small sharp knife or scalpel.└
9. ⌠es020 Two pair of scissors.└
10. ⌠il3⌠ir(one small and sharp pointed for cutting⌐
11. ⌠il4skin).└
12. ⌠es010⌠il3 (the other somewhat larger and stronger⌐
13. ⌠il4 for cutting bone).└
14. ⌠es020⌠xi⌠il2 Sharp pointed forcepts.└
15. ⌠il3 (4 to 6 inches long).└
16. ⌠es020⌠il2 Pliers with a cutting edge.└
17. ⌠il3 (linesman's type).└
18. ⌠es020⌠il2 Pins.└
19. ⌠es020Needles and thread.└
20. ⌠es020Labels.└
21. ⌠il3⌠ir (made of tough, waterproof paper. Labels⌐
22. ⌠il4will be supplied upon request if the speci-⌐
23. mens are to be collected for the National⌐
24. Museum).└
25. ⌠es080⌠xi⌠140⌐2 Preparing Labels└
26. ⌠es040⌠il1⌐1⌠120 Labels should be made of a good grade of
    heavy, com-⌐
27. pletely waterproof paper. If the standard museum labels⌐
28. are not available, test the paper to be used by soaking it for⌐
29. several hours in warm water.└
30. ⌠ej⌐

TABULAR/COLUMNAR MODES



INTRODUCTION

A page of composition that contains several columns of text, like that in newspapers, can be typeset in two ways. The first column can be set down the page, a line at a time, until the column is complete. Then the typesetter returns to the top of the page and begins setting the second column. The typesetter proceeds just as a reader would follow the text, in the order it was written. This is called COLUMNAR MODE.

In tab mode you step from one column to the next setting one line in each column before moving down the page.

Another way of setting the same material is called TABULAR MODE. In this mode the typesetter sets the first line of text in the first column and then moves to the second column. Typesetting continues across the page until the first line of every column is complete. Then the typesetter returns to the left margin and begins setting the second line of each column. In this mode the typesetter does not have to advance and reverse paper but simply works downward from the top of the page.

In columnar mode you set all of one column before you return to the top of the page and begin the next column.

LEARNING GOALS

At the conclusion of this section you will be able to:

1. *Set tab widths.*
2. *Set type horizontally*, a line at a time, in tabular mode.
3. *Set type vertically* to a specified depth in picas and points, using the columnar mode.
4. *Use indents* within tabs and columns.
5. *"Quit"* (stop using) the tabular and columnar modes.

QUADRITEK CAPABILITIES

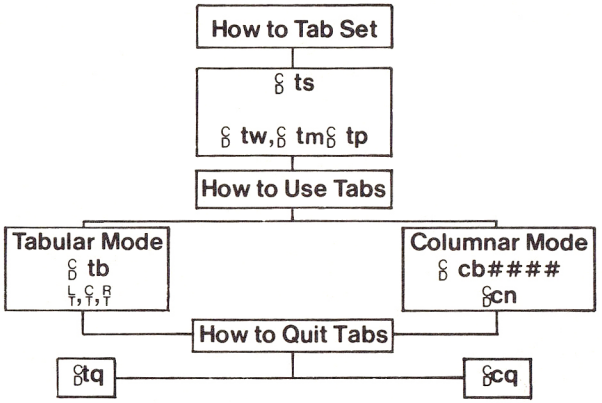
The Quadritek 1200 can:

- Store 20 tab positions. A line length is established for each tab within the overall line length.

This can be done in three ways:

1. Tab-width
2. Tab-mark
3. Tab-proportion

- Use tab widths to typeset information across the full line length, in the tabular mode. The operator steps across the line, from tab to tab.
- Use tab width to typeset all the information vertically within the tab (only part of the full line length) before moving to the next tab, in columnar mode. The depth of the column may be up to 12 inches (72 picas).
- Stop using tabs and return to the full line length, but store the tabs for later use.



HOW TO SET TABS

WHY

To set the tab widths you must:

A. Tell the Quadritek that tab widths are going to be established.
B. Tell the Quadritek the tab widths.

HOW

A. To tell the Quadritek that tab widths are going to be established:

1. Press the COMMD Key
2. Enter the mnemonic for "Tab-set"

ts

To the right, is a sample of the copy you will be typesetting in this sequence of Action/Feedbacks. Refer to this example as you proceed.

U.S. Unit		Metric Equivalent
one inch (equal to 0.083 foot)	-	2.54 centimeters
one foot	-	0.3048 meter
one yard	-	0.9144

U.S. Unit	Metric Equivalent
one inch (equal to 0.083 foot)	2.54 centimeters
one foot	0.3048 meter
one yard	0.9144 meter

U.S. Unit	Metric Equivalent
one inch (equal to 0.083 foot)	2.54 centimeters
one foot	0.3048 meter
one yard	0.9144 meter

U.S. Unit Metric Equivalent

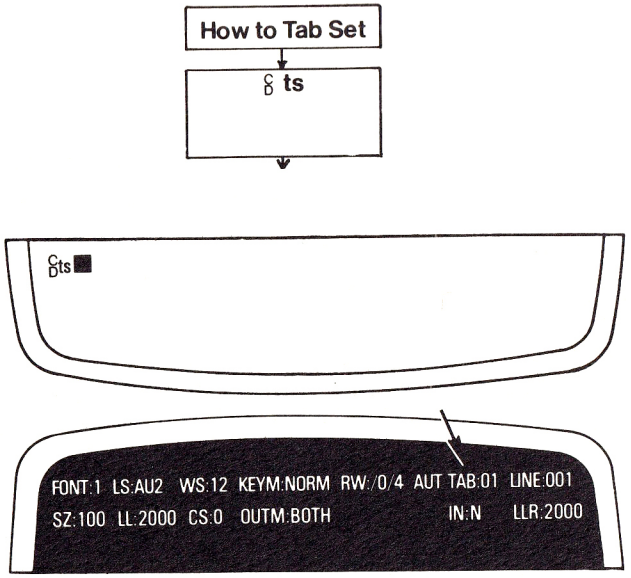
Action 1

Keyboard the command for tab set.

ts

Feedback

You have just told the Quadritek that tabs are to be set. Verify that in the format field. TAB:01 is displayed.



B. Tab widths are entered with one or more of the following commands:

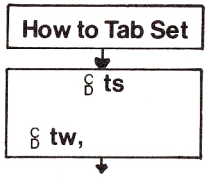
- Tab width — Defines a tab width in five numbers; the first two indicate the number of picas, the second two the number of points, the last one the number of tenths of a point.
- Tab mark — Defines a tab width by entering the longest line in the column. This could be the longest word/s or number/s, etc. in that column.
- Tab proportion — This is the last command to be entered when setting tabs. It expands the tabs so they fill the entire line length, with each tab in proportion to its original size. The tab-proportion command is used only with tab-width and/or tab-mark.

TAB WIDTH

To enter tab widths using TAB-WIDTH:

1. Press the command key.
2. Enter the mnemonic for "tab-width," "tw"
3. Keyboard five numbers; two for picas, two for points, one for tenths of a point.

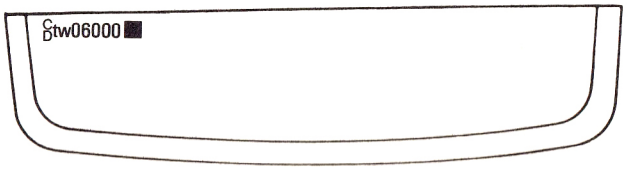
tw#####



Action 2

Keyboard the command for a tab width of six picas.

tw06000



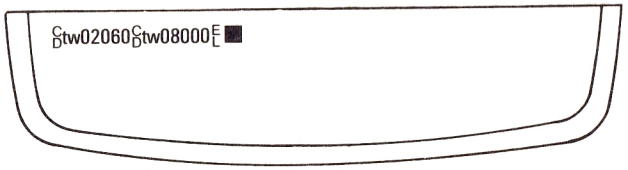
Feedback

Verify that the format field shows the LLR is six picas less (LLR:1400) and the tab indicator displays TAB:02.

Action 3

Finish keyboarding the remainder of this line.

$^{C}_{D}$tw02060$^{C}_{D}$tw08000$^{E}_{L}$



Feedback

The end-line is required to send the tab-set line to the output field and to the typesetter memory. The tab-set line does not advance paper. As a result, functions such as extra space are ignored. You have now established a tab six picas wide and a tab eight picas wide, separated by a two and one half pica tab that will serve as a "gutter" of white space.

HOW TO TYPESET IN TABULAR MODE

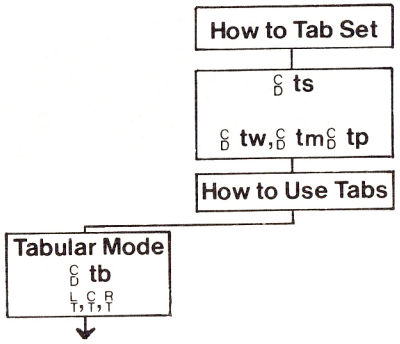
Up to this point the Quadritek has only been told where the tabs are positioned. Now the operator must select either the tabular or columnar mode.

To enter the tabular mode:

1. Press the COMMD key.
2. Enter the mnemonic for "tab begin," "tb."

$^{C}_{D}$tb

- This command must be entered before any text can be set in a line.
- Tab-begin is used to return to tab 1, at any time.
- To set type, move from one tab to the next, or skip over a tab, use the left, right, or center keys. Composition will be positioned in the tab as indicated by these keys.
- To set type and stay in the same tab, use the end-line or end-paragraph keys.



Action 4

Now, put the tabs in use by keyboarding the tab-begin command.

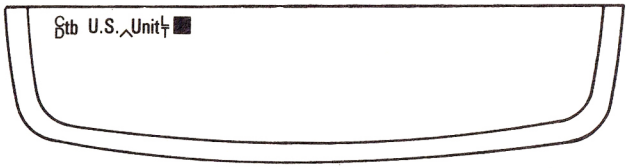
Feedback

Verify that TAB:01 is displayed in the format field. The LLR should show the line length of tab 1. The LLR will always count down the length of the tab in use.

Action 5

Keyboard the following:

U.S. Unit↳



Feedback

Verify that the line went to the output field. "U.S. Unit" has been typeset in the first tab. The tab indicator will display TAB:02 and the LLR reflects the width of tab two. Remember, only the LEFT, CTR, and RIGHT keys move you from tab to tab.

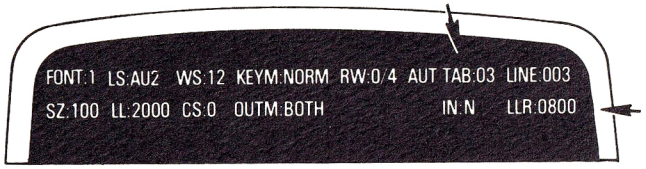
Action 6

Tab two is the 2½ pica gutter that will separate the two columns of type. **Step over tab two, leaving it blank.** (The left, center, or right keys allow you to skip over a tab.)

↳

Feedback

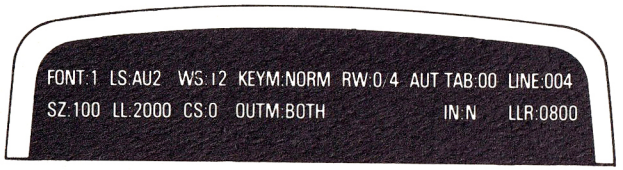
Verify that TAB:03 is indicated in the format field, and the LLR reflects the width of the tab.



Action 7

Now keyboard the following:

Metric Equivalent↳



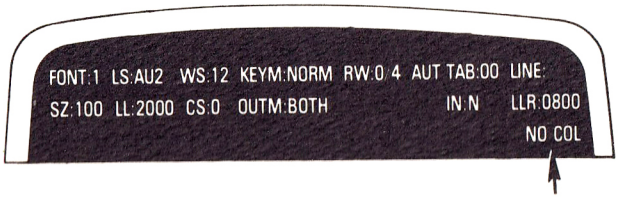
Feedback

The line was typeset flush right in the third tab. The tab indicator in the format field now displays TAB:00. The LLR shows the line length of the last tab.

Action 8

Without returning to the left margin, try to set some more copy.

Length↳



Feedback

The keyboard is locked up and the message "NO COL" is displayed. No column has been established here. You must return to the left margin by keyboarding a tab-begin command.

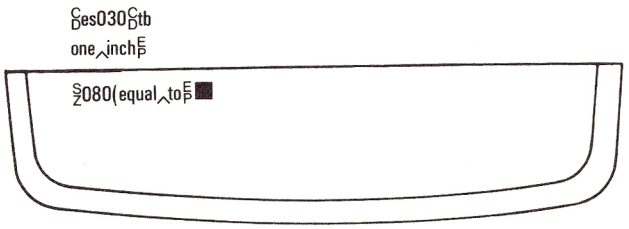
Action 9

Cancel the copy in the input field. Keyboard extra space of three points to separate the column headings from what you are going to do in the next sequence of actions. Then enter a tab-begin command.

CANCEL
CANCEL
$^{C}_{D}$es030$^{C}_{D}$tb

Feedback

Verify that TAB:01 is displayed. Note that the tab-begin command does not have to be set at the beginning of the line. However, it must be given before any text is to be typeset.



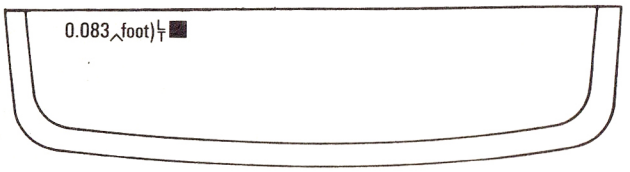
Action 10

Set the following, using the commands indicated:

one inch$^{E}_{P}$
$^{S}_{Z}$080 (equal to$^{E}_{P}$

Feedback

Verify that TAB:01 is still in use. The end-line and end-paragraph keys allow you to stay in the same tab.



Action 11

Set the following:

0.083 foot)$^{L}_{T}$

Feedback

Verify that TAB:02 is displayed in the format field. The Quadritek will now reverse space back to the first line of the tab, where the last tab-begin command was given.

Action 12

Typeset a hyphen in tab 2 and "2.54 centimeters" in tab 3.

$^{S}_{Z}$100–$^{C}_{T}$
2.54 centimeters$^{R}_{T}$

Feedback

The "2.54 centimeters" will be typeset flush right on the first line of tab three.

Action 13 — **Return to the first tab and typeset the following:**

tb one foot

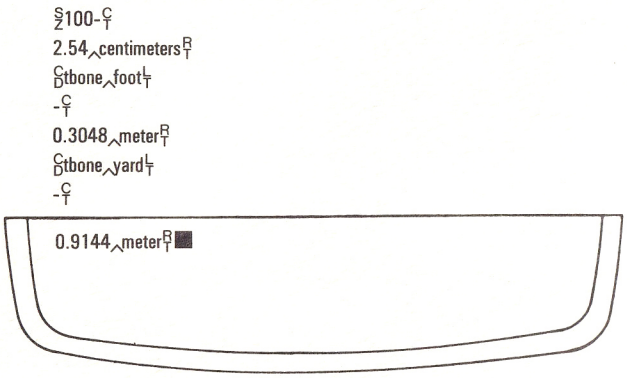
Feedback — This line will be typeset one line below the deepest line of the tabs previously set.

Action 14 — **Typeset a hyphen in the gutter and the proper data in tab 3.**

-
0.3048 meter

Action 15 — **Begin again with the first tab and typeset the last line of information.**

tb one yard
-
0.9144 meter

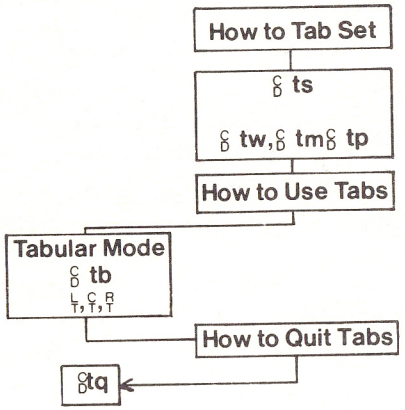


QUITTING TABS

To quit (stop using) the tabular mode:

1. Press the COMMD key.
2. Enter the mnemonic for "tab-quit," "tq"
   tq

Tab-quit must be entered at the beginning of the line.



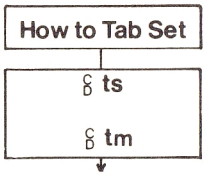
Action 16 — **Quit tabs.**

tq

Feedback — Verify that the format field shows tabs are no longer in use (tab:00). The LLR now reflects the full or overall line length. The command "tab-quit" removes you from tab mode and returns the Quadritek to the full line length. The tab values are still in the Quadritek memory and can be used at a later time by entering the

tab-begin command. Only one set of tab values is stored at a time (old values are erased when new ones are entered). New tab values cannot be entered when tabs are being used. The tab-quit command must be given before new tab widths can be entered.

TAB MARK



To enter tab widths, using TAB-MARK:

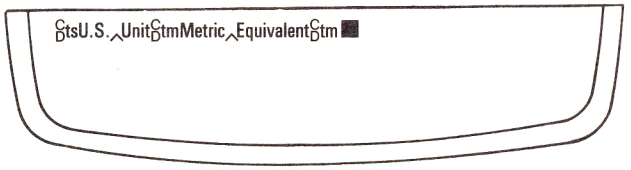
1. Keyboard the line that represents the tab width. This should be the longest line in the tab.
2. Press the COMMD key.
3. Enter the mnemonic for "tab mark," "tm."

(longest line) tm

Note that this entry requires information before the COMMD key is pressed.

Action 17

Watch the LLR as you set new tab values, using the tab-mark command. To the right is an example of this sequence of Action/Feedbacks.



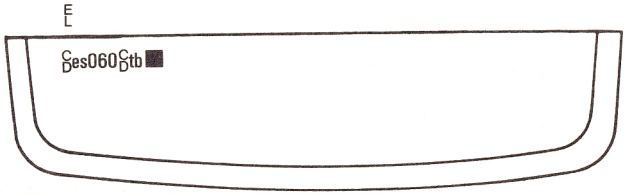
tsU.S. Unittm Metric Equivalenttm

Feedback

Verify that the LLR counted down when you initiated each tab-mark command and that the tab indicator in the format field advanced to the next tab. In this example no gutter (column of white space) was left between the tabs. These two tabs will be typeset with no space between them.

Action 18

Send the tab-set line to the output field by pressing the end-line key. Separate your previous work from what you are about to typeset by keyboarding six points of extra space. Then call up the tabs for use.



E
L
es060tb

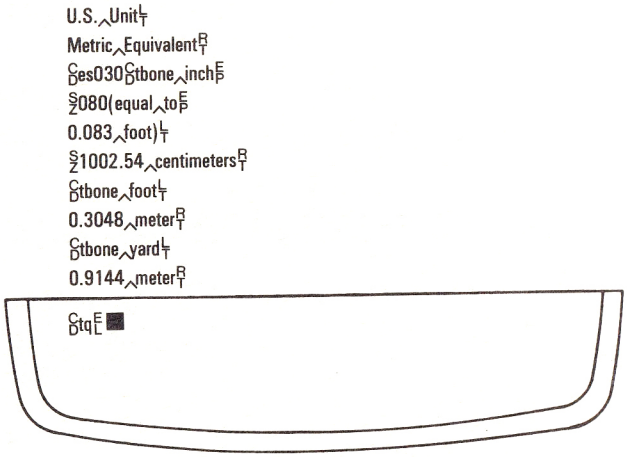
Feedback

Verify display of TAB:01 in the format field. The LLR now shows the exact tab width required for the line "U.S. Unit."

Action 19

Set the remainder of the copy and quit tabs.

U.S. Unit
Metric Equivalent
es030tb one inch
080(equal to
0.083 foot)
100 2.54 centimeters
tbone foot
0.3048 meter
tb one yard
0.9144 meter
tq



Feedback

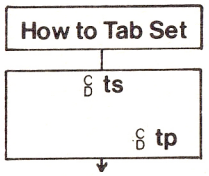
In this tab-set sequence no white space was allowed between the two tabs or within the tabs. When the copy is processed you will see that these two tabs are touching. In practical application tabs should always be established with gutters of white space between the entries. This can be done by assigning tabs as gutters or by adding additional space within tabs.

TAB PROPORTION

To expand the tabs, proportionally, to fill the full line measure:

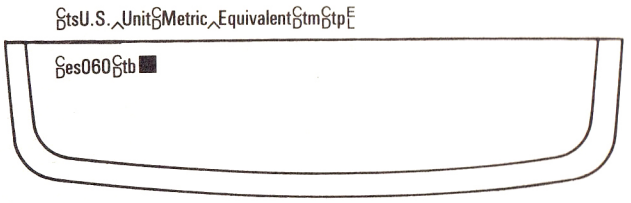
1. Press the COMMD key.
2. Enter the mnemonic for "tab proportion," "tp"

tp



This function is particularly useful when used with tab-mark or a combination of tab-width and tab-mark. Suppose, for example: 13 columns of information must be typeset across a 40 pica line. Six tabs have been set using tab-width and seven have been set using tab-mark. After these widths have been entered the LLR reads 0810, indicating that the total width of the tabs so far, is 31 picas

and 2 points. How much of the remaining 8 picas and 10 points of white space should be added to each tab to fill up the 40 pica line? The calculations will be made and the extra space distributed, automatically, if the tab-proportion command is entered.



Action 19

Keyboard the same tab-mark example. This time follow it with a tab-proportion command. Again add six points of extra space and begin using the tabs.

tsU.S. UnittmMetric EquivalenttmtpE
es060tb

Feedback

Verify that TAB:01 is displayed in the format field. The LLR will reflect the expanded line length.

Action 20

Typeset the following and quit tabs.

U.S. Unit
Metric Equivalent
es030tb one inch
080 (equal to
0.083 foot)
100 2.54 centimeters
tb one foot
0.3048 meter
tb one yard
0.9144 meter
tqE

Feedback

Because of the tab-proportion command, the two tabs will be expanded to fill the entire line length.

Action 21

Keyboard the following tabs, using tab-mark and tab-width, and then begin using tabs.

ꞩtsU.S. Unitꞩtmꞩtw02060Metric Equivalentꞩtmꞩ

ꞩes060ꞩtb

Feedback

Verify that TAB:01 is displayed in the format field. These tabs show how tab-mark and tab-width can be used together to establish fixed gutters.

Action 22

Keyboard the following and give the end-job command.

U.S. Unit↳

↳

Metric Equivalent↱

ꞩejꞩ

Feedback

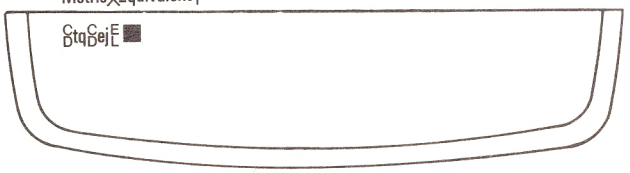
A "beep" was sounded and the keyboard locked. The end-job command cannot be given when tabs are still being used.

Action 23

Insert the command to quit tabs and then end the job. Compare your work to the example at the right. If they do not match re-do the examples before proceeding.

ꞩtqꞩejꞩ
EOC

ꞩtsU.S.^Unitꞩtmꞩtw02060Metric^Equivalentꞩtmꞩ
ꞩes060ꞩtb
U.S.^Unit↳
↳
Metric^Equivalent↱
ꞩtqꞩejꞩ■



U.S. Unit		Metric Equivalent
one inch (equal to 0.083 foot)	-	2.54 centimeters
one foot	-	0.3048 meter
one yard	-	0.9144 meter

U.S. Unit	Metric Equivalent
one inch (equal to 0.083 foot)	2.54 centimeters
one foot	0.3048 meter
one yard	0.9144 meter

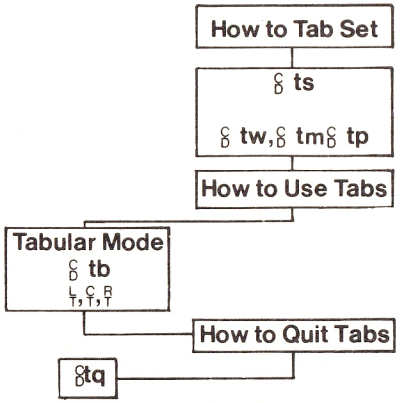
U.S. Unit	Metric Equivalent
one inch (equal to 0.083 foot)	2.54 centimeters
one foot	0.3048 meter
one yard	0.9144 meter

U.S. Unit Metric Equivalent

The following charts summarize the tab commands and functions.

TAB COMMANDS	
tab set	⊂ts
tab width	⊂tw # # # # # picas/points/tenths of point
tab mark	– – – – ⊂tm longest line of tab
tab proportion	⊂tp

- Tab-set, tab-width, tab-mark, and tab-proportion must be entered at the beginning of a line.
- When tabs are set, any combination of tab-width, tab-mark, and tab-proportion commands may be used.
- Tabs are stored until new tabs are entered or the initial operating conditions are restored



USING TABS FOR TABULAR MATERIAL			
Beginning tabs and Return to Left Margin ⊂tb	Moving from Tab to Tab ⊂ or	Remain in Same Tab or	Quit Tabs ⊂tq

Tabs/Exercise # 1

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

INVESTMENT PORTFOLIO

Principal Amount	Commercial Paper	Average Cost	Market Value
$100,000	Amoco Credit Corp. 4⅞% Due 12/2/76	$ 99,973	$ 99,975
100,000	Cargill Incorporated 4⅞% Due 12/3/76	99,973	99,974

The following two accounts are indicating to show a great profit in the future. Please make a note to follow up on these people.

100,000	Consolidated Foods Credit Corp. 4⅝% Due 12/3/79	199,919	199,922
150,000	Standard Oil Co. 4¾% Due 12/16/79	99,780	99,980
	Total Commercial Paper	$499,645	$499,851

Tips for Setting this Exercise

1. If an operator should use extra space on the tab set line, the extra space will not take effect.
2. Any extra or reduce space that is to affect an entire tab line must appear before the tab-begin. If an operator uses extra or reduced line space after the tab-begin it will affect only the first tab and the following tabs will not align with the first tab.
3. In order to get all the figures to align, figure spaces must be used. (The dollar sign has a width value of a figure space).
4. Remember that a tab-quit just takes tabs out of use. The tab values (tab-set) are retained in memory. When setting this exercise, it is necessary to tab-quit to typeset the line at the center of the copy. To resume tabs, the operator just keyboards a tab-begin.
5. The operator must quit tabs before an end-job.

Typeset this copy by following the mark up. The operator can use tab width, extra space and figure space.

HE rom.
9/12 33½ □

gutters at 3 □

INVESTMENT PORTFOLIO 12' Bold

← 4 → Principal Amount	← 12½ → Commercial Paper (+12')	← 4 → Average Cost	← 4 → Market Value
	+6'		
$100,000	Amoco Credit Corp. 4 7/8% Due 12/2/76	$99,973	$99,975
	+6'		
100,000	Cargill Incorporated 4 7/8% Due 12/3/76	99,973	99,974
	+6'		

The following two accounts are indicating to show a great profit in the future. Please make a note to follow up on these people.

	+6'		
200,000	Consolidated Foods Credit Corp. 4 5/8% Due 12/3/79	199,919	199,922
	+6'		
150,000	Standard Oil Company 4 3/4% Due 12/16/79	99,780	99,980
	+6'		
	Total Commercial Paper	$499,645	$499,851

Keystrokes for Tabs Exercise # 1

1. ⌐3 ⌠120 ⌡120 ⌊3306 INVESTMENT PORTFOLIO¬

2. ⌂ts ⌂tw04000 ⌂tw03000 ⌂tw12060 ⌂tw03000 ⌂tw04000 ⌂tw03000⌂tw04000⌐

3. ⌐1 ⌠090 ⌂es120 ⌂tbPrincipal¬¬ Commercial¬¬ Average¬¬ Market¬

4. ⌂tbAmount¬¬Paper¬¬Cost¬¬Value¬

5. ⌂es060 ⌂tb$100,000¬¬Amoco Credit Corp.¬¬$⌐99,973¬¬ $⌐99,975¬

6. ⌂tb ⌡⌡4⌂78%¬

   ⌂tb ⌡⌡ Due 12/2/76¬

8. ⌂es060⌂tb⌐100,000¬¬Cargill Incorporated¬¬⌐⌐99,973¬¬ ⌐⌐99,974¬

9. ⌂tb ⌡⌡ 4 ⌂ 78% ¬

10. ⌂tb ⌡⌡ Due 12/3/76 ¬

11. ⌂es060 ⌂tq The following two accounts are indicating to show a great profit in the future. Please make a note to follow up on these people.⌐

12. ⌂es060 ⌂tb ⌐100,000 ¬¬ Consolidated Foods Credit Corp. ¬¬ ⌐199,919 ¬¬ ⌐199,922¬

Tab Exercise # 2

To d o this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

GROSS EARNINGS

Annual Earnings	First Year	Second Year	Third Year
$ 8,000	$15,000	$ 51,000	$ 53,000
12,000	20,000	71,000	75,000
18,000	25,000	81,000	99,000
20,000	37,000	91,000	122,000
25,000	47,000	113,000	138,000

13. Gtb ⅟⅟ 4¢58%¢

14. Gtb ⅟⅟ Due 12/3/79 ¢

15. Ges060 Gtb £ 150,000 ¢¢ ⅟⅟ Standard Oil Co. ¢¢ff£99,780 ¢¢ ff£99,980¢

16. Gtb ⅟⅟ 4 ¢34% ¢

17. Gtb ⅟⅟ Due 12/16/79 ¢

18. Ges060 Gtb ⅟⅟ Total Commercial Paper ¢¢ ⅟⅟ $499,645 ¢¢ $499,851 ¢

19. Gtq Gejf

Tips for Setting this Exercise

1. In a tab-mark, use a full space instead of the word space. (The Quadritek calculates the word space at minimum value).
2. Make sure the Quadritek is set at the desired font and size before using the tab-mark.

Typeset this copy by following the mark up. The operator will be using tab mark, tab width, extra space and figure space.

HE rom, HE ital.
9/11 25□ 14' Head
gutters @ 1□

] GROSS EARNINGS [14' Bold
+24'

Annual Earnings	First Year +6'	Second Year	Third Year
$ 8,000	$15,000	$51,000	$53,000
12,000	20,000	71,000	75,000
18,000	25,000	81,000	99,000
20,000	37,000	91,000	122,000
25,000	47,000	113,000	138,000

Keystrokes for Tab Exercise # 2

1. f3 §140 §AU2 £2500 GROSS EARNINGS¢

2. §090 Gts Annual § Earnings Gtm Gtw01000 First§Year Gtm Gtw01000 Second § Year Gtm Gtw01000 Third §Year Gtm§

3. Ges240GtbAnnual Earnings ¢¢First Year¢¢Second Year¢¢Third Year¢

4. f1 Ges060 Gtb $ĉ8,000¢¢$15,000¢¢$51,000¢¢$53,000¢

5. Gtbĉ12,000¢¢ĉ20,000¢¢ĉ71,000¢¢ĉ75,000¢

6. Gtbĉ18,000¢¢ĉ25,000¢¢ ĉ 81,000¢¢ ĉ 99,000¢

7. Gtbĉ20,000¢¢ĉ37,000¢¢ ĉ 91,000¢¢ 122,000¢

8. Gtbĉ25,000¢¢ĉ47,000¢¢ 113,000¢¢ 138,000¢

9. GtqGejE

Exercise # 3

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

Copies	Cost/Copy	Total Cost/Copy
1-3	$.05	$.0416
4-12	.03	.0216
13-over	.06	.0066

Tips for Setting this Exercise:

1. Remember that the tab-proportion command is entered at the end of the tab-set line.
2. Use the figure space to get the figures to align.

Typeset the following exercise using the tab-mark and tab-proportion follow the mark up as indicated.

20□ bold 11/13

HE rom.

Copies	Cost/Copy	Total Cost/Copy
1 - 3	$.05	$.0416
4 - 12	.03	.0216
13 - over	.06	.0066

Keystrokes for Tab Exercise # 3

f3 §110 §130 L2000 Gts Copies Gtm Cost/Copy Gtm Total Cost/Copy Gtm Gtp E

Gtb Copies ¶ Cost/Copy ¶ Total Cost/Copy ¶

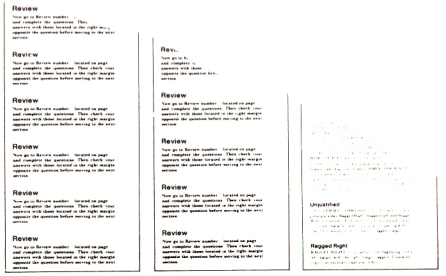
f1 GtbĠ1-3 ¶ $.05¶ $.0416¶

Gtb Ġ4-12 ¶ Ġ.03 ¶ Ġ.0216 ¶

Gtb 13-over¶Ġ.06 ¶ Ġ.0066 ¶

Gtq GejE

HOW TO TYPESET IN COLUMNAR MODE



HOW

After the tab-set entries have been entered, the operator may choose to set type in columns.

HOW

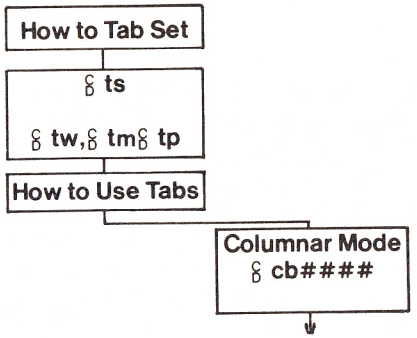
To enter the columnar mode.

1. Press the COMMD Key.
2. Enter the mnemonic for "column begin" "cb"
3. Enter a four digit number to indicate the depth of the column to be typeset. The first two numbers are picas and the second two are points.

   ⁐cb # # # #

- The column-begin command must be entered at the beginning of a line.
- The end-line, end-paragraph, right, left, and center keys function as they normally do. Typesetting continues in the same column when these keys are used.

  R, L, C, E, E

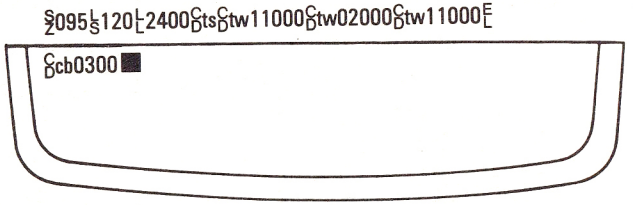


Action 1

Keyboard the following tab-set line. Then keyboard a column-begin command followed by the depth of the column in picas and points.

⁐095 ⁐120 ⁐2400 ⁐ts ⁐tw11000 ⁐tw02000 ⁐tw11000E

⁐cb0300



Feedback

Verify that TAB:01 is displayed in the format field and that the LLR is 11 picas. The column depth has been established at three picas.

Action 2

Keyboard the following copy until the "COL DEPTH" message appears in the message area of the VDT. (Remember, in columns the end-of-line keys function as usual).

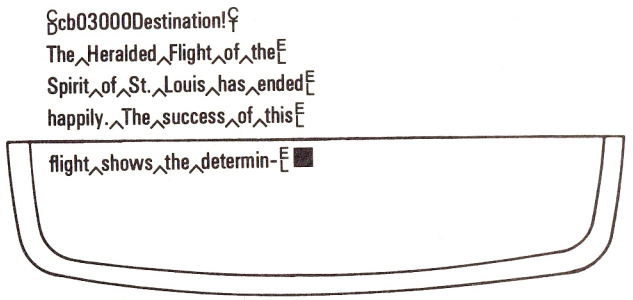
Destination!

The Heralded Flight of the

Spirit of St. Louis has ended

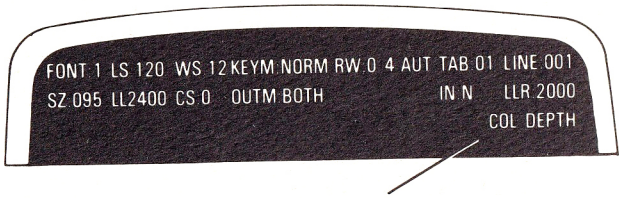
happily. The success of this

flight shows the determin-



Feedback

Verify that "COL DEPTH" is displayed on the VDT. The message "COL DEPTH" will be displayed every time a line exceeding the established column depth is sent to the output field.



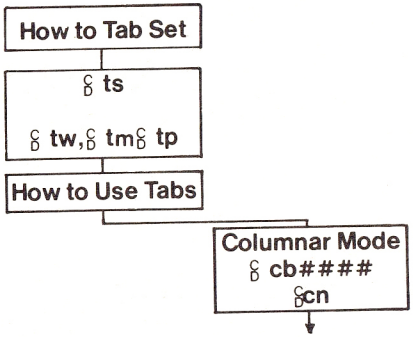
COLUMN TO COLUMN

To move from one column to the next:

1. Press the COMMD key.
2. Enter the mnemonic for "column next," "cn"

cn

● The column-next command must be entered at the beginning of a line.

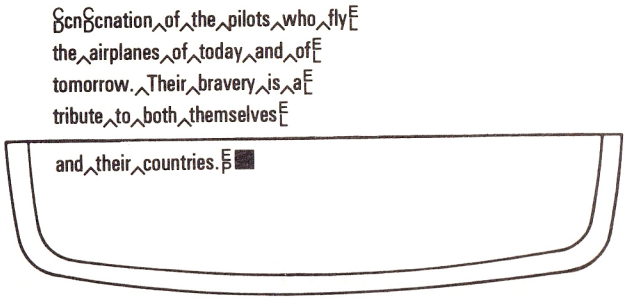


Action 3

Move to the third column (the second column is a gutter of white space) and begin setting the following, until the "COL DEPTH" message is displayed. (The first Col Depth message will disappear when the first line of the next column is processed.)

cn cn ation of the pilots who fly

the airplanes of today and of



tomorrow. Their bravery is a ⏎

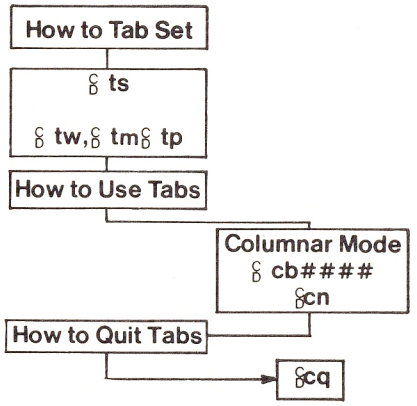
tribute to both themselves ⏎

and their countries.⏎⏎

Feedback

Verify that TAB:03 is displayed on the VDT. The message "COL DEPTH" should be displayed. The second column of type has now been typeset.

QUITTING COLUMNS



To quit (stop using) the columnar mode:

1. Press the COMMD key.
2. Enter the mnemonic for "column quit," "cq"

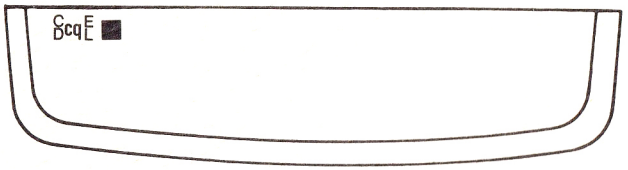
cq

- Column-quit must be entered at the beginning of a line.
- The typesetter is returned to the overall line measure, one line below the deepest tab/column.

Action 4

Keyboard the command for column quit.

cq⏎



Feedback

When the column quit command is given the typesetter is returned to the full line measure on the left margin, *one line below the deepest column typeset.* The tab set values are stored in memory for future use.

Action 5

Process the typeset copy

ej⏎

Feedback

Compare your copy with the examples. Re-do the examples if they do not match.

Destination!
The Heralded Flight of the Spirit of St. Louis has ended happily. The success of this flight shows the determination of the pilots who fly the airplanes of today and of tomorrow. Their bravery is a tribute to both themselves and their countries.

USING TABS COLUMNAR MATERIAL			
Beginning Column at Left Margin $^{C}_{D}$cb####	Moving from Column to Next Column $^{C}_{D}$cn	Remain in Same Column $^{L}_{T}$ $^{R}_{T}$ $^{C}_{T}$ $^{EE}_{LP}$	Column Quit $^{C}_{D}$cq

Columns/Exercise

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

Typesetting is by definition the assembly of characters of the alphabet into words to relate a message or idea—written communication. The first form of written communication traces its origin back to caveman drawings called "pictographs." They were used the same way as we use the alphabet today to relate a message. The evolution from the pictograph to the alphabet as we know it today was slow. The Romans are given credit for adapting the basic alphabet as we know it.

Typeset the following copy into two columns as indicated.

8/10 HE rom.
25 □
two columns
@ 12 □ each
1 □ gutter
col. depth
@ 4½ □

Typesetting is by definition the assembly of characters of the alphabet into words to relate a message or idea - written communication.

The first form of written communication traces its origin back to caveman drawings called "pictographs." They were used the same way as we use the alphabet today to relate a message.

The evolution from the pictograph to the alphabet as we know it today was slow. The Romans are given credit for adapting the basic alphabet as we know it.

Keystrokes for Column Exercise:

F1 §080L2500 §ts§tw12000§tw01000§tw12000E

§cb0406 Typesetting is by definition . . . .

(COL DEPTH message appears) §cn§cn (copy)

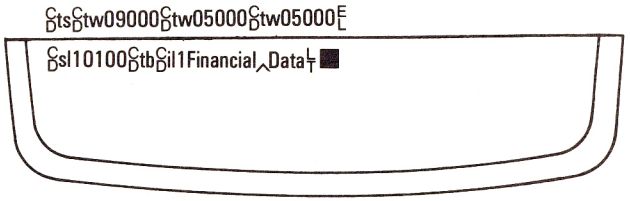
§cq§ej§E

INDENTS WITHIN TABS

How to use indents within tabs:

1. Store the tabs and indents.
2. Enter the tab/column
3. Keyboard the entry for the desired indent.

- An indent is cancelled when another tab is entered.
- More than one indent may be used in any tab.



Action 1

Set the following examples using the tab-set line and indents indicated.

§ts §tw09000 §tw05000 §tw05000E

§sl10100 §tb §il1 Financial Data

Feedback

Verify that the indent is in use in TAB:01

Action 2

Set the line and move to tab two.

↳

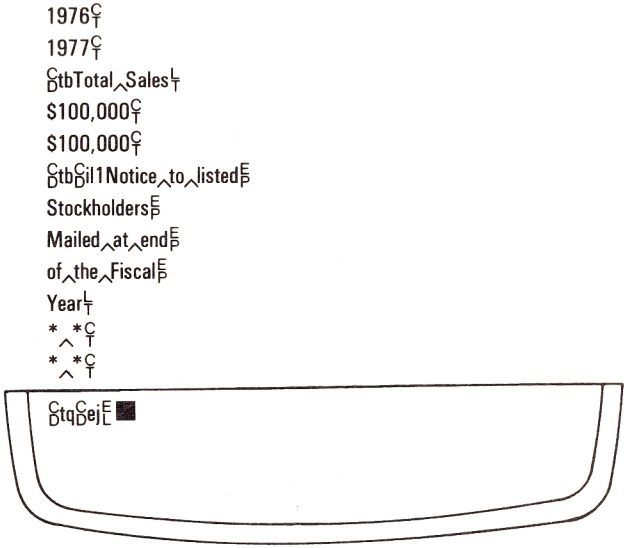
Feedback

Verify that TAB:02 has been entered and the indent has been cancelled. An indent may be recalled at anytime but will always be cancelled when a tab is exited.

Action 3

Typeset the following and process your copy:

1976
1977
tb Total Sales
$100,000
$100,000
tbil1Notice to listed
Stockholders
Mailed at end
of the Fiscal
Year
* *
* *
tqej



Feedback

Verify that the indent was cancelled when you left tab one. The indent stays in effect as long as type is sent *within* the tab, unless the cancel-indent command is given.

Process your copy and re-do the example if the samples do not match.

Financial Data	1976	1977
Total Sales	$100,000	$100,000
Notice to listed Stockholders Mailed at end of the Fiscal Year	**	**

Tabs-Indents/Exercise

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

APPLICATION LISTING

Application	Description	Industries
Accounting Forms	Reduce large accounting sheets Reproduce large accounting forms one and two-up	Accounting Firms Law Firms Consultants Financial Institutions Banks Brokerage Firms Security Exchanges Federal & State Government
Advertising Proofs	Newspaper & Magazine layouts for approval or reprints Reduced or size for size	Newspaper & Magazine Publishers Commercial Printers Advertising Agencies
Directories Direct mail catalogues Internal Office Listings	4-up Reduce Size Pocket directories	Direct Mail publishers Commercial Printers All in-plant
Engineering drawings Wiring diagrams Floor Plans Architectural layouts Engineering design Schematics Service diagrams Installation drawings	Size for size up to "C" size Reduce up to "D" size	Architectural & Engineering firms Electronics & Computers Federal & State Government Manufacturing Electrical Plumbing Roads Residential builders (single & multiple family dwellings) Mobile home manufacturer New town developers Commercial developers

Tips for Setting this Exercise

1. An indent that is in use within a tab is cancelled as soon as you move to the next tab.
2. Extra space should be entered in before the tab begin.

Typsest the following exercise. Use the automatic reverse leading in tabs.

10/12 HE rom.
46□

16'

APPLICATION LISTING bold

+24'

Application	Description	Industries
	+12'	
Accounting Forms	Reduce large accounting sheets Reproduce large accounting forms one and two-up	Accounting Firms Law Firms Consultants Financial Institutions 1 pica — Banks Brokerage Firms Security Exchanges Federal & State Government
	+6'	
Advertising Proofs	Newspaper & Magazine layouts for approval or reprints Reduced or size for size	Newspaper & Magazine Publishers Commercial Printers Advertising Agencies
	+6'	
Directories 1 pica — Direct mail catalogues Internal Office Listings	4-up Reduce Size Picket directories	Direct Mail publishers Commerical Printers All in-plant
	+6'	
Engineering drawings Wiring diagrams Floor Plans Architectural layouts Engineering design chematics ervice diagrams Installtion drawings	Size for size up to "C" size Reduce up to "D" size	Architectural & Engineering firms Electronics & Computers Federal & State Government Manufacturing Tools Instruments Automobiles Chemicals Contractors and Construction Electrical Plumbing Roads Residential builders [redacted] es Mobile home manufacturer New town developers Commercial developers

← 14□ →

← 17□ →

← 15□ →

KEYSTROKES FOR EXERCISE

F3 §160 ⅛160 L4600 APPLICATION LISTING¶

¶ts¶tw14000¶tw17000¶tw15000E

¶es240 F3 §100 ⅛120 ¶tb Application¶Description¶Industries¶

¶es120 F1 ¶tbAccounting Forms⅛ Reduce large accounting sheets§ Reproduce large accounting forms§ one and two-up⅛ Accounting Firms§Law Firms§Consultants§Financial Institutions§¶sl10100 ¶il1 Banks§ Brokerage Firms§ Security Exchanges§ ¶xi Federal & State Government⅛

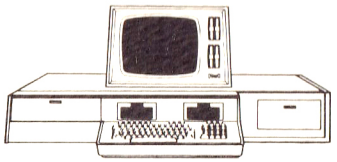
¶es060 ¶tb Advertising Proofs ⅛ Newspaper & Magazine layouts for § approval or reprints § Reduced or size for size ⅛ Newspaper & Magazine Publishers § Commercial Printers§ Advertising Agencies⅛

¶es060 ¶tb Directories§ ¶il1 Direct mail catalogues§ Internal Office Listings⅛ § 4-up § Reduce Size§ Pocket directories⅛ § Direct Mail publishers§ Commercial Printers§ All in-plant⅛

¶es060 ¶tb Engineering drawings§ ¶il1 wiring diagrams § Floor Plans§ Architectural layouts§ Engineering design§ Schematics§ Service diagrams§ Installation drawings⅛ Size for size up to "C" size § Reduce up to "D" size⅛ Architectural & Engineering Firms§ Electronics & Computers§ Federal & State Government§ Manufacturing§ ¶il1 Tools§ Instruments§ Automobiles § Chemicals§ ¶xi Contractors and Construction§ ¶il1 Electrical§ Plumbing§ Roads§ Residential builders§ Mobile home manufacturer§ New town developers§ Commercial developers⅛

¶tq¶ejE

SETTING TYPE USING THE MARK-POINT RETURN-POINT



INTRODUCTION

The mark-point/return-point function allows the Quadritek operator to mark a reference point on a page and then to return to it later. This is particularly useful when typesetting forms, charts, graphs, and other jobs that require several vertical lines or columns of type.

LEARNING GOALS

At the conclusion of this section you will be able to:

1. *Mark a point* in copy being typeset.
2. *Return to a point* marked earlier.

QUADRITEK CAPABILITIES

The Quadritek 1200 can:

- Mark one reference point at the left margin and store this location in the mini-computer for later reference.
- Return to the point at any time. The Quadritek can go back 14 inches.

MARK POINT

WHY

In order to set several vertical columns of type side by side, the Quadritek must set one column, return to its starting point, indent, and then set another column down the page. To do this the typesetter must know the starting point, so that each column begins at the same place.

HOW

How to mark a point

To store the mark-point:

1. Press the COMMD key.

Mark Point

xHow do we identify type and what are some of the characteristics that are unique to various kinds of type? Let's start with the kind of type you are reading, it is called Roman type. Just about everything you read is in Roman type. Slanted type styles are referred to as Italic and are used to set a word or phrase off from the rest of the paragraph. Still a third version of type would be bold. It is used to set a word or phrase apart from the rest of the page. In phototypesetting there are many different designs of type. For example, a Roman type may be called Helvetica, like the type you are reading now or it

2. Enter the mnemonic for "mark-point," "mp"

§mp

- The mark-point is established at the left margin, at the baseline, of the line in which the command is entered.
- The mark-point command may be given anywhere in a line.
- The mark-point is automatically cancelled when more than 14 inches (84 picas) of copy have been typeset. At 12 inches (72 picas) from the mark-point a "beep" will sound and the warning message "TOO FAR" will appear at the upper right of the VDT. The "beep" will then sound and the message will flash each time a line is typeset. At 14 inches the mark-point will be cancelled.
- A mark-point is cancelled when a new mark-point is entered, initial operating values are restored, or the 14 inch (84 pica) maximum is passed.

RETURN POINT

HOW

How to return to a point
To return to the mark-point:
1. Press the COMMD key.
2. Enter the mnemonic for "return point" "rp"

§rp

- The return-point command may be entered anywhere in a line. All of the line will be returned to the mark-point.
- The return-point command cannot be used on the same line as a tab-set, tab-begin, tab quit, column-begin, or column-quit command.

NAME	MNEMONIC KEYSTROKES	CANCELLED
Mark-Point	ßmp	Another mp is established, after 14 inches (84 picas), ej, or re-initialization.
Return-Point	ßrp	Self-cancelling.

REVIEW

1. The keyboard entry that identifies a point to return to is _____ .
2. To return to a point the keyboard entry is _____ .
3. Mark-point is cancelled when:
   A. _____
   B. _____
   _____
   _____
4. Return-point will not work if:
   A. _____
   B. _____

ANSWERS

1. ßmp
2. ßrp
3. A. another mark-point is established
   B. typesetting continues more than 14 inches from the mark-point, an end-job command is entered, the initial operating values are re-initialized.
4. A. There is no mark-point in memory,
   B. the mark-point is more than 14 inches back.

MARK POINT

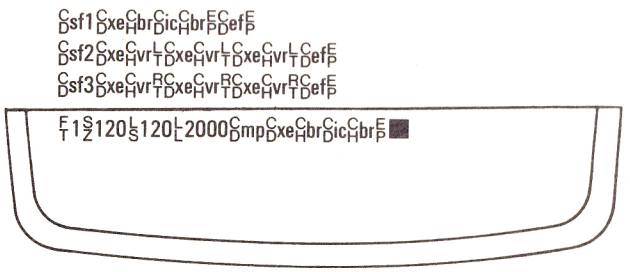
Action/Feedback

By going through the following sequence of Action/Feedback, the operator will be typesetting the example to the right.

Quadritek 1200

Action 1

Set the following formats and mark point:

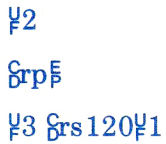


Feedback

At this point all the operator has done is to store all repetitive keystrokes in formats, establish the parameters and a mark point, and set a baseline rule.

Action 2

Set the vertical rules and last baseline rule by keyboarding the following:



Feedback

Format 2 has set the left vertical rule. The return-point command reversed the paper back to the top and format 3 set the right vertical rule. The reverse space of 120 brought the typesetter back to the baseline of the vertical rules. Format 1 is the baseline rule.

Action 3 **Position the copy by typesetting the following:**

Crp E

Quadritek 1200 C

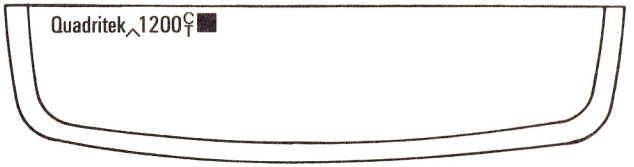
Feedback The return-point command brought the typesetter back to the mark-position, which is the upper left hand corner. The end-paragraph command advanced the paper 12 points.

Action 4 **End the job and process your copy.**

Cej E

Feedback Compare the copy with the examples to the right.

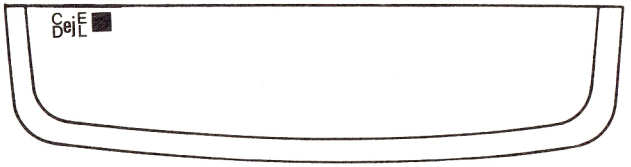
Cxe C vr L T Cxe C vr L T Cxe C vr L T
Crp E
Cxe C vr R T Cxe C vr R T Cxe C vr R T
Crs120 Cxe C br Cic C br E
Crp E



Quadritek 1200

Exercise/Mark Point-Return Point

Typeset the following, using the steps outlined below:



This box was typeset on the Quadritek 1200

1. Store all repetitive keystrokes in formats:

   Csf1 Cxe C br Cic C br E Cef E (baseline rule)

   Csf2 Cxe C vr L Cxe C vr L Cxe C vr L Cef E (left vertical rule)

   Csf3 Cxe C vr R Cxe C vr R Cxe C vr R Cef E (right vertical rule)

2. Set job parameters, mark point and baseline rule.

   F 1 S 120 L 120 L 0900 Cmp U 1

3. Set the vertical rules and the bottom baseline rule.

   U 2 Crp E U 3 Crs 120 U 1

4. At this point change the line length and point size. You also need to set a left indent for the copy.

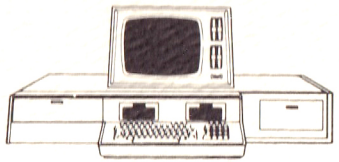
   ⊢2000 §100 ⊆sl11000

5. Return-point, indent, and set the copy. End the job.

   ⊆rp⊆il1 (copy. . . "This box was...")

   ⊆xi⊆ej⊑

EXTRA AND REDUCED ESCAPEMENT



AW

AW

VA Normal | VA Kerning | ET Normal | ET Extra Escapement

Introduction

Certain combinations of characters result in the appearance of too much or too little white space between them. In quality typesetting these spaces have been adjusted so the characters "fit together better." Reduced escapement is used to decrease character space very small amounts, to tuck or fit characters together. This is called KERNING. Extra escapement is used to add space between specified characters. Skill in the use of these commands can be gained only through experience.

Learning Goals

At the conclusion of this section you will be able to:

1. Select and use *extra escapement.*
2. Select and use *reduced escapement.*

Quadritek Capabilities

The Quadritek 1200 can:

- Use extra escapement to add 1-99 relative units of white space between specified characters.
- Use reduced escapement to decrease the space between specified characters 1-99 relative units.

Reduced Escapement

How

To reduce the space between two characters:

1. Press the COMMD key.
2. Enter the mnemonic for "reduce escapement," "re"
3. Keyboard a two digit number, from 01 to 99, indicating the number of relative units of reduction.

ꞩre (## from 01-99)

- This command may be entered anywhere in a line, where it follows a character.
- The reduce-escapement command affects only the character following the command.
- The value of reduced escapement entered cannot be more than the width of the character preceding the command.

Extra Escapement

How

To increase the space between two characters:

1. Enter the mnemonic for "extra escapement," "ee"
3. Keyboard a two digit number from 01-99, indicating the number of extra relative units of space.

$^{C}_{D}$ee (## from 01-99)

- This command may be entered any place in a line, so long as it is preceded by a character.
- The extra escapement command is self-cancelling. It affects only the character following the command.

Name	Keystrokes	Cancelled
Reduce Escapement	$^{C}_{D}$re (##)	Self Cancelled
Extra Escapement	$^{C}_{D}$ee (##)	Self Cancelled

REVIEW

1. What is the effect of extra escapement?
2. What is the effect of reduced escapement?
3. Escapement can be increased or decreased using the extra or reduce-escapement commands. What is the maximum amount of space that can be added or reduced?
4. By what name is reduce-escapement usually referred?
5. Write the command for reducing escapement by 5 units.
6. Write the command for extra escapement of 3 units.

ANSWERS

1. To add white space between selected characters.
2. To take out space between selected characters.
3. 99 relative units
4. kerning
5. Gre05
6. Gee03

REDUCED AND EXTRA ESCAPEMENT

Action/Feedback

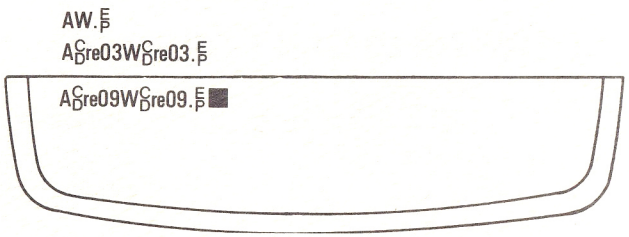
Action

Typeset the following information with no reduced escapement, then with three units of reduced escapement, and finally with nine units of reduced escapement.

AW.

A re03W re03.

A re09W re09.



Feedback

The first line will be set normal - no reduced escapement. The second and third lines will be set with the characters closer together, with the periods tucked under the W's. The third line will be the tightest, with nine units taken out.

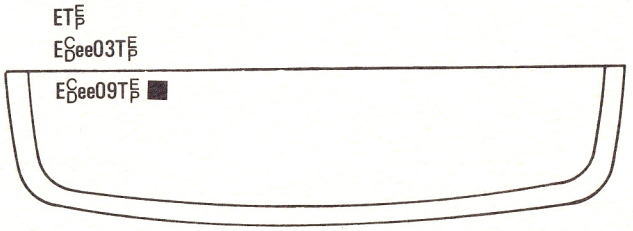
Action 2

Typeset the following information with no extra escapement, then with three units of extra escapement, and finally with nine units of escapement.

ET

E ee03T

E ee09T



Feedback

The first line will be set formal - no extra escapement. The second and third lines will be set with extra space between E and T. The third line will be the most open with nine units of white space.

Action 3

Process and compare your copy.

ej

AW.
AW.
AW.
ET
ET
E T

Feedback

Compare your copy with the typeset sample. If they do not look similar go back and re-do the examples.

Exercise/Escapement

To do this exercise: 1) Study the typeset copy immediately below. This is what you want your copy to look like. 2) Read the 'tips.' 3) Try to typeset the exercise, looking only at the marked up copy. This is what you would receive if you were a typesetter who was receiving a job. 4) Check your copy. Refer to the list of keystrokes if you cannot do a particular part of the exercise.

LAYAWAY
LAYAWAY

SETTING
SETTING

Typeset the following words - once without any extra or reduced escapement, and once placing the extra and reduced escapement as indicated.

HE bold 36/38 480

LAYAWAY

LAYAWAY

+1 -3 -3

+12'

SETTING

SETTING

+1 +2 +1

Keystrokes for Exercise

F3 §360 §380 L4800 LAYAWAY¼

LA$_{gre}$03Y$_{gre}$03A$_{gre}$03W$_{gre}$03A$_{gre}$03Y¼

$_{ges}$120SETTING¼

SE$_{gee}$01T$_{gee}$02T$_{gee}$01ING¼

MODULE IX

26. Quadritek Editor

Itek

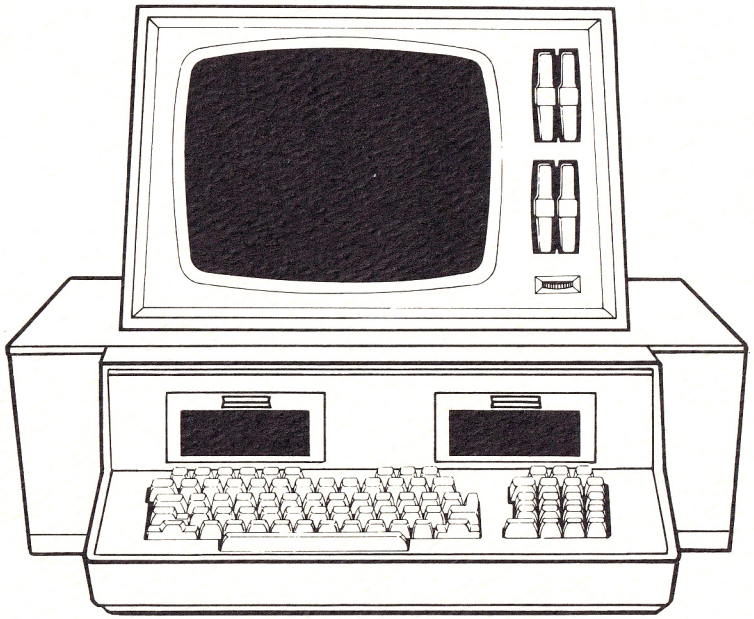
The Quadritek 1200

Operator Learning Program

MODULE IX

ITEK QUADRITEK EDITOR™

Operator's Learning Program



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THE ITEK QUADRITEK EDITOR™ OPERATOR'S LEARNING PROGRAM

The Itek Editor is designed to allow fast and easy editing of information that has been recorded on the Quadritek 1200 Phototypesetter. It uses a special editing program and can also be used as an auxiliary keyboard, to create new tapes for use with the phototypesetter.

What is this course?

This learning program will teach you how to operate the Itek Editor. The same combination of "reading and doing" that is used in the *Quadritek 1200 Operator's Learning Program* is used here.

How do you use this course?

The operation of the Editor and Quadritek 1200 is similar and a person trained in the use of the Quadritek can complete this course in a short period of time. It has been presumed that the student is skilled in the use of the Quadritek. If you have not completed the *Quadritek 1200 Operator's Learning Program,* or need to review it, do so now.

This course is divided into sections that describe the Editor, and how to use it, with reading material printed in regular type. Actions to be taken using the Editor are printed in bold type. "Feedback" is given at intervals to help you verify that the actions were taken correctly.

When you have completed your Quadritek 1200 training or review proceed to the next section.

THE QUADRITEK EDITOR

INTRODUCTION

The Editor is used with the Quadritek 1200 phototypesetter and has been designed to allow fast and easy editing of information. The special Editor "software" program has editing and control features that allow the operator to insert, move, replace, delete, and search for information that has been recorded on a Quadritek. The Editor may also be used as an auxiliary keyboard, to create new recorded material for use by the phototypesetter.

LEARNING GOALS

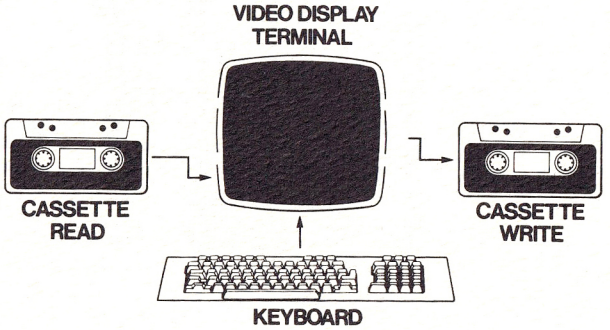
At the conclusion of this section you will be able to:

1. Describe the *major Editor areas.*
2. Describe the *differences* between the Quadritek 1200 and the Editor.
3. Describe the *environmental requirements* of the Editor.
4. Describe *how information moves* in, through, and out of the Editor.
5. Define *buffers* and *string storage.*

EDITOR CAPABILITIES

The Editor can produce an edited tape cassette, using only three basic steps.

- Information is fed into the Editor from a magnetic tape cassette or the keyboard.
- The stored information is edited by the operator.
- The edited information is sent from the Editor storage and recorded on another tape cassette.



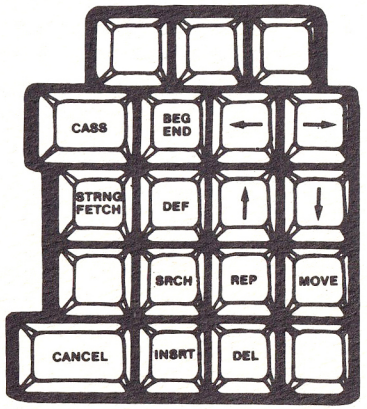
DESCRIPTION

The Editor has four major areas:

1. The keyboard is used to enter editing commands and information and consists of a main keyboard and, to the right, an auxiliary (editing) keyboard.
2. The tape cassette drives are used to feed information into the Editor and record data sent out. They are called the "read" (in) and "write" (out) cassette drives.
3. The video display terminal (VDT) is used to view information that is stored in the Editor.
4. The mini-computer memory or "buffer" stores the information that is fed into the Editor. A buffer is *between* two things; in this case, between the cassette drive and/or keyboard that enters information and the "write" cassette drive that finally receives the edited data.

EDITOR AND QUADRITEK 1200

The Editor is similar to the Quadritek 1200. Because the Editor performs no typesetting it contains no font assembly, optical system, or photographic material transport. The FWD FEED, REV FEED, and DISC keys associated with those assemblies, as well as the NEXT REC and EOC keys are not needed on the Editor. To accomplish the special editing functions seven new keys are used on the Editor auxiliary keyboard. These will be explained later in this program.



ENVIRONMENTAL REQUIREMENTS

Environmental factors will affect the Editor. These requirements should be checked when the Editor is installed or moved to a new location. These requirements are:

- Power - 115V, 15 amp, dedicated line.
  (No other machine, lights, etc. operating from it). If two Editors, or one Editor and one Quadritek are being used, one dedicated 115V, 20 amp line may be used for both.
- Temperature - 60° - 90° F.
- Warm up time - 5 minutes or less.

HOW THE EDITOR WORKS

Use of the Editor involves three basic steps. Information is fed into the machine BUFFER from the read cassette station or the keyboard. The buffer contents can then be displayed on the VDT and changed by the operator. When editing has been completed all or part of the buffer contents can be sent to the write cassette station. Editor operators will always be doing one of these three tasks; sending in information, editing, or taking information out.

BUFFERS

The buffer, between input and output, can hold a total of 12,000 characters. It is divided into two parts, with the size of each part determined by the operator.

- Text buffer - This area stores the information that is sent to the buffer from the read cassette or the keyboard. 3,000 - 11,000 characters.
- String storage - This part of the buffer is used to store "strings" of information that are like the formats of the Quadritek. The operator can select sections of text and store them in this portion of the buffer. They can then be called up and used as often as needed. This allows use of the same information, time after time, without re-keyboarding. From 1,000 to 9,000 characters can be stored in this area.

REVIEW

1. The Editor performs no typesetting functions and, therefore, has no _____,
   _____,
   or _____.

2. The four major areas of the Editor are the k_____
   _____, _____,and
   _____.

3. The main keyboard of the Editor is _____ the main Quadritek keyboard.

4. The Editor should be plugged into a dedicated power line that feeds _____ other electrical appliances.

5. Use of the Editor involves three basic operations; information is fed i_____ the machine, e_____, and then r_____ on a magnetic tape cassette.

6. The Editor memory, or buffer, can hold _____ characters of information. The buffer is divided into the t_____ buffer and the _____ _____ buffer.

7. The text buffer can be designated to hold _____ to _____ characters of information and the string storage area can hold _____ to _____ characters.

ANSWERS

1. font assembly, optical system, photo material transport
2. keyboard cassette drives, VDT mini-computer memory (buffer)
3. the same as
4. no
5. into, edited recorded
6. 12,000 text string storage
7. 3,000 to 11,000
   1,000 to 9,000

INITIAL OPERATING CONDITIONS

INTRODUCTION

The first part of Editor operation involves putting information in the buffer. To do this the machine must be turned on, the operating program loaded, and the operating conditions and values determined.

LEARNING GOALS

At the end of this section you will be able to:

1. Turn *on and off* the Editor.
2. Load the Editor *operating program.*
3. Set the size of the *string storage* area and *text buffer.*
4. Identify the parts of the *VDT display* area and set the values of the *status line.*

EDITOR CAPABILITIES

The Editor can:

- Use a sophisticated "software" operating program that can be restarted at any time.
- Store "strings" of information in a special string storage area that can contain 1,000 to 9,000 characters.
- Store from 3,000 to 11,000 characters of text.
- Display 16 lines of information with up to 64 characters per line.

ON/OFF

How to Turn the Editor on or off:

1. Locate the power switch. It is at the right rear (as you face the front of the machine) by the power cord.
2. Move the switch to the on or off position, as needed.

LOADING THE EDITOR OPERATING PROGRAM

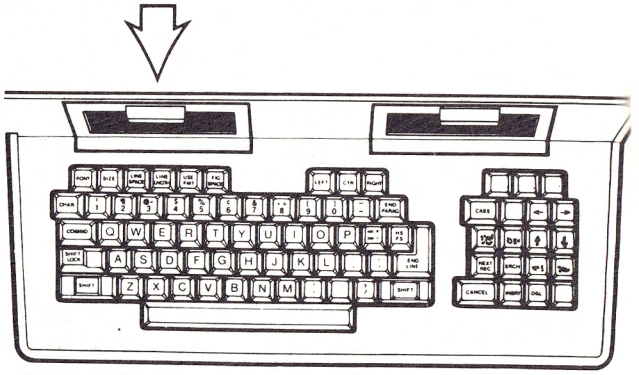
The operating program is a set of instructions, stored on magnetic tape, that are loaded into the Editor. These instructions tell the mini-computer how to work and process information. Two copies of the program are included with each Editor. One of these cassettes should be used for daily work and the other copy should be stored in a safe place. Additional copies of the program can be made by using the copy-cassette function.

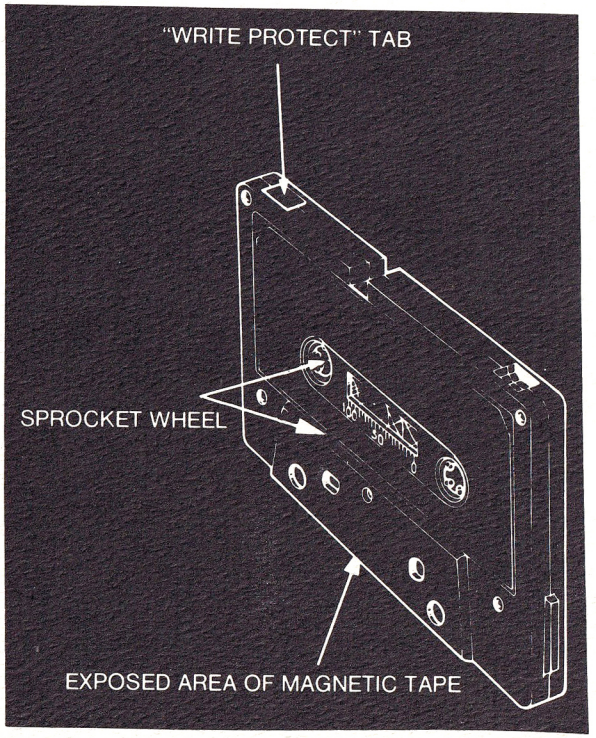
The program must be loaded whenever the Editor is turned on.

To load the Editor operating program:

1. Place the Editor tape cassette in the read (left-hand- station with the red warning label facing toward the machine.
2. Press the initialization switch, at the left of the read station.
3. Remove the cassette after the program has been loaded and the tape has been automatically rewound.

● The program must be loaded whenever the Editor is turned on.





Action 1

Turn on the Editor by reaching behind the right rear part of the machine and moving the power switch to the "ON" position.

Feedback

When the VDT shows lines of flashing hyphens, the operational program may be loaded. If the Editor fails to come on, insure that it is plugged in and receiving power.

Action 2

Place the Editor program in the read cassette station (left-hand station) with the red warning label ("Do not record data on this side") toward the machine.

Action 3

Press the initialization switch which is at the left of the read station.

Feedback

The VDT display will disappear and the program cassette will be read and rewound. When the program has been successfully loaded a three line message will appear on the VDT. After this message appears, proceed to the next step.

```
YOU HAVE 12000 CHARS SPACE AVAILABLE.
MINIMUM/MAXIMUM ALLOWABLE STRING STORAGE IS 1000/9000
ENTER SIZE OF STRING BUFFER IN THOUSANDS?
```

Action 4

Remove the program cassette from the read station.

STRING STORAGE AND THE TEXT BUFFER

The Editor has a memory that allows the operator to store 12,000 characters of information. This memory is divided into the string storage (or string buffer) area and the text buffer. The exact size of each area is determined by the operator.

The *text buffer* can contain 3,000 to 11,000 characters. This data consists of words, numbers, commands, and all other information that is entered from a tape cassette or the keyboard. Cassettes are those made on a Quadritek 1200 or Editor and loaded into the text buffer for editing. Changes in the text or new information that is keyboarded is also stored in the text buffer.

The *string storage* area is used to store 1,000 to 9,000 characters of material that the operator needs to use over and over as he edits. The "strings" that are stored are similar to the Quadritek "formats." These strings can be put in the storage area from a cassette or the keyboard.

SELECTING STRING STORAGE SIZE

To select the size of the string storage and text buffer:

1. Look at the VDT to see that the three line message, asking for the size of the string buffer, is displayed. This shows that operating program has just been loaded or re-started. This message notes the maximum size of the whole buffer (12,000 characters) and the size that the string storage area can be (1,000 to 9,000 characters).

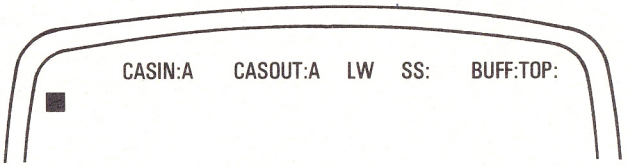
```
YOU HAVE 12000 CHARS SPACE AVAILABLE.
MINIMUM/MAXIMUM ALLOWABLE STRING STORAGE IS 1000/9000
ENTER SIZE OF STRING BUFFER IN THOUSANDS?
```

Action 5

Press the key for the number six, to indicate six thousand characters may be stored in the string storage portion of the buffer, leaving 6,000 characters for text.

Feedback

The display went off and then the operational status line appeared, with the cursor displayed at the beginning of the second line. The program is loaded.



If the Editor "beeps" when you pressed the key, insure that you pressed a number key from 1 to 9, and that the keyboard is not in the shift (upper case) position.

RESTARTING THE OPERATING PROGRAM

After the operating program has been loaded it can be returned to its initial condition at any time. This "re-starting" of the program clears any information in the Editor memory and checks the program. Re-starting is necessary when there is an error condition or when the operator wishes to erase all the information that has been entered in the text buffer, string storage, etc.

Start

To Restart the Operating Program:

1. When an error condition occurs and an error message is displayed on the VDT, press the cassette key (CASS). If the error message is the code 080 the program must be reloaded.

CASS

2. The operator can restart the program at any time by pressing the cassette key and entering the mnemonic code for "restart."

C̲rs

When the operating program has been loaded or restarted the three line message will be displayed on the VDT, telling the operator to enter the size of the desired string storage.

Action 6

Keyboard the following:

The Editor

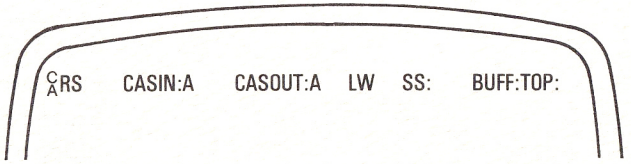
Feedback

The two words are shown on the second VDT line and are now contained in the text buffer. There are no input or output fields like those of the Quadritek.

Action 7

Re-start the program by pressing the CASS key and the keys for the letters "rs".

C̲rs



Feedback

The three line message, telling you to enter the size of the string storage buffer, has been returned to the VDT.

Action 8

Enter a string storage size of seven thousand characters.

7

Feedback

The operational status line has been returned to its initial condition and the words you put in the text buffer have been erased.

THE OPERATIONAL STATUS LINE

The operational status line appears in the first line of the 16 line VDT picture after the size of the string storage area has been entered. This line is similar to the Quadritek format field and consists of seven status messages that keep the operator informed about all Editor functions.

The seven status line areas are:

1. Command input field - This area is normally a blank space at the beginning of the status line. Editor commands are not used by the Quadritek and therefore are not inserted in the text as editing proceeds. Instead, they are displayed in the status line.

CASSETTE INPUT (CASIN:)

2. Cassette input mode - Information may be fed into the Editor in three modes. These are selected by the operator.

   - Automatic - Information can be entered into the Editor memory from the "read" cassette station or the keyboard.
   - Manual - This mode is identical to the automatic mode. Information may enter from the read cassette station or the keyboard. The present version of the Editor operational program allows identical operation in automatic and manual modes.
   - None - Information can be entered only from the keyboard.

HOW

To enter a cassette input mode:

1. Press the CASS key.
2. Enter the mnemonic for "cassette input automatic," "manual," or "none."

ϛcia, ϛcim, ϛcin

Action 9

Look at the operational status line. The first zone is blank and the next zones display CASIN:A CASOUT:A LW SS: BUFF:TOP:

Feedback

The first zone is blank because no commands have been entered. The other zones show that the input mode is "automatic," the output mode is "automatic," and the line-wrap mode is being used. No search string has been entered so there is a blank after "SS:." The last part of the line indicates that the display shows the TOP of the text buffer.

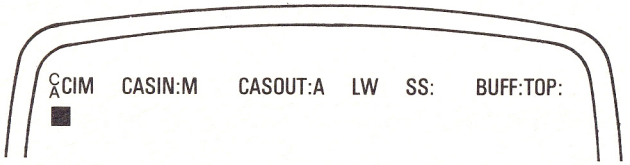
Action 10

Enter the command to change the input mode to manual, by pressing the CASS key and the mnemonic for "cassette-in manual."

CASS cim

Feedback

The operational status line has changed and now shows CASIN:M. Note that the command that you entered is displayed in the first zone of the status line.



CASSETTE OUTPUT (CASOUT:)

3. Cassette output mode - - The third field of the operational status line shows the mode in which information will be sent from the buffer. The modes are the same as the input modes, but in this case automatic and manual work differently.

   - Automatic - The edited text will be recorded on the output (write) cassette in "packed" form. Each record will be 200 characters long, allowing storage of three times as much information on a cassette as is stored by the Quadritek 1200. Because exactly 200 characters are written per record, a record may end in the middle of a line or word.
   - Manual - The edited text will be recorded, also in "packed" form, but with each Editor record ending with one of the five end-line commands.
   - None - The write cassette station is turned off.

HOW

To set the cassette output mode:

1. Press the CASS key.
2. Enter the mnemonic code for "cassette output automatic," "manual," or "none."

ÇAcoa, ÇAcom, ÇAcon

Note: Cassettes recorded in the automatic mode should always be played back on the Quadritek in automatic line-ending mode. Cassettes recorded in manual mode may be played back in manual, but if re-justification is required the automatic mode should be used.

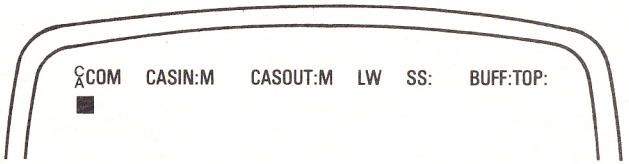
Action 11

Change the output mode to manual by pressing the CASS key and keyboarding the mnemonic for "cassette-out manual."

ÇAcom

Feedback

The command is displayed in the first zone of the VDT and CASOUT: reads "M"



VDT LINE ENDING

4. VDT Line Ending Mode - This area of the operational status line shows how lines on the VDT will be ended and displayed.

- Line Wrap (LW) - Lines will end:

– anywhere an end-paragraph, left, right, or center command appears.

– Where any discretionary hyphen, hyphen, word space, or end-line command appears within the last ten characters of the line. If more than one of these appears within the last ten characters the one nearest the end of the line will be used.

- Word Wrap (WW) - Lines will end:

  – Anywhere an end-paragraph command appears.

  – Within the last ten characters in the line where a discretionary hyphen, hyphen, word space, or left, right, center, or end-line command appears. If more than one of these appears in the last ten characters, the one nearest the end of the line will be used.

The word wrap mode allows display of more information on the VDT because only lines that contain an end-paragraph command can contain less than fifty-four characters.

HOW

To enter the line-wrap or word-wrap modes:

1. Press the CASS key.
2. Enter the mnemonic for "line wrap" or "word wrap"

CASS lw or CASS ww

Action 12

Keyboard the following: (Do Not correct errors at this time.)

The Editor ↳ The Editor ↲

The Editor ↱ The Editor ↳

The Editor ↳ The Editor —

The Editor is an "offline" keyboard editing terminal designed for use with the Quadritek 1200 phototype setter. It has been engineered to allow flexibility in text manipulation. Included in the Editor are increased editing and control features.

Feedback

The display is in neither word-wrap nor line-wrap until an editing function is entered.

Action 13

Enter the command to use the word-wrap VDT line-ending mode.

CAwW

Feedback

The VDT lines end where an end-paragraph occurs. Discretionary hyphens, hyphens, word spaces or left, right, or center commands are used to end lines only where they come within the last 10 characters of a line.

```
CAWW     CASIN:A     CASOUT:A     WW     SS:     BUFF:TOP
The^Editor LTThe^Editor CTThe^Editor BTThe^Editor BT
The^Editor ETThe Editor-The^Editor^is^an^"offline"^keyboard^
editing^terminal^designed^for^use^with^the^Quadritek^1200^
phototypesetter. ETIt^has^been^engineered^to^allow^flexibility^in^
text^manipulation.^Included^in^the^Editor^are^increased^editing^
and^control^features. ET
```

Action 14

Note the number of lines of space used in word-wrap mode and then **enter the command to use line-wrap mode.**

CAlw

Feedback

In this mode, lines end with any of the five end-line commands. The end-line command is used only when it falls within the last ten characters of a line, like the hyphens and word space. Note that more lines are used for the same information.

```
CALW     CASIN:A     CASOUT:A     LW     SS:     BUFF:TOP
The^Editor LT
The^Editor CT
The^Editor BT
The^Editor BT
The^Editor ETThe^Editor-The^Editor^is^an^"offline"^keyboard^
editing^terminal^designed^for^use^with^the^Quadritek^1200^
phototypesetter. ETIt^has^been^engineered^to^allow^flexibility^in^
text^manipulation.^Included^in^the^Editor^are^increased^editing^
and^control^features. ET
```

5. Stored String (SS) - The fifth zone of the operational status line gives the identifying code of the last string of information stored in the string buffer. These strings, like the Quadritek formats, are identified by the operator with numbers, letters, or other characters so that he can refer to them easily.

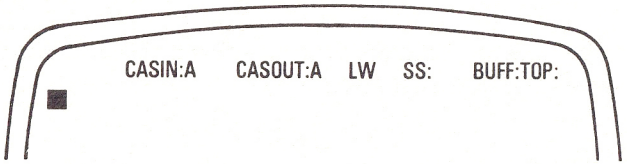
6. Text Buffer - This zone tells the operator where in the text buffer he is working. Because this buffer can contain up to 11,000 characters, the operational status line shows the operator whether the information shown on the VDT is from the top, middle, or bottom of the buffer. The zone will display the words "TOP" or "BOT." When work is being done in the middle of the buffer this zone in the operational status line is blank.

This zone also displays the word "FULL" when all the storage space in the text buffer has been filled up.

7. The message area - The right end of the operational status line displays status and error messages. A list of these messages is given at the end of this learning program.

THE OPERATIONAL STATUS LINE INITIAL VALUES:

The Operational Status Line consists of seven parts. Below is a chart listing the various sections and their initial value.



Operational Status Line	Initial Value	Purpose	Capabilities	Associated Keyboard Commands
Command Input Field.	Blank	Displays all Editor commands as key-boarded.		—
CASIN: (Cassette Input Mode).	A	Indicates what input mode is in use.	A or M - automatic or manual designates cass-ette input. N - None designates no cassette input.	^C^A cia ^C^A cim ^C^A cin
CASOUT: (Cassette Output Mode).	A	Indicates what output mode is in use.	A-Automatic designates cassette packing in 200 character records. M-Manual designates packing of characters or records to a maximum of 256. N-None designates no cassette output.	^C^A coa ^C^A com ^C^A con

VDT Screen Line Ending Mode	LW WW	Indicates VDT screen line ending method.	LW - Line Wrap WW - Word Wrap	^C^A lw ^C^A ww
Stored String	SS	Indicates last string stored in memory.	1-9 A-Z All punctuation or typesetter commands.	See section on stored strings
Buffer	Buff: Top	Indicates area of Buffer now in use: Top, Middle, or Bottom. shows when buffer is full.	Top: (Blank): BOT: (Bottom) FULL: (displayed to right of this zone.)	—
Message Area	Blank	Displays operational messages and error conditions.	See list included in back of the Editor section.	—

THE VDT TEXT LINES

Below the VDT operational status line fifteen more lines of information can be displayed on the VDT.

- Line 2 - Displays text that has been entered by the operator or can be used as a second part of the status field to show a search string that has been defined. If used for this purpose the text begins on line three.
- Line 3 - Displays text. Can be used as a third part of the status field to show a "replacement string." This is information that is to be used to replace "search string" data shown on line two. If used for this purpose, text will begin on line four.
- Line 4 - 16 - - Will always display text from the text buffer.

REVIEW

1. When can the operating program be re-started? The command to re-start is _____ .

2. When an error message appears, the program can be restarted by _____ . When an error code _____ appears the program must be reloaded.

3. The Editor buffer stores t_____ that is to be edited, and s_____ of information that are to be recalled later.

4. The _____ zone of the operational status line is blank until a _____ is entered.

5. The Editor input modes, automatic and manual, allow information to be entered from the _____ and _____ .

6. In automatic output mode information will be packed, _____ characters per record: In manual mode each record will end with _____ .

7. Cassettes recorded on the Editor should usually be played on the Quadritek in the _____ line-ending mode.

8. Line-wrap mode uses _____ VDT lines than word-wrap mode.

9. The BUFF zone of the status line indicates whether the information on the VDT is from the _____ , _____ , or _____ of the text buffer. When this zone is blank the VDT shows information from the _____ .

10. The second VDT line can display a _____ or _____ . The third line can show a _____ or _____ .

ANSWERS

1. anytime, Ęrs
2. pressing the CASS key, 080
3. text strings
4. first command
5. read cassette keyboard
6. 200 one of the five end-line commands.
7. automatic
8. more
9. top, middle, bottom, middle of the text buffer
10. search string text replacement string text

ENTERING INFORMATION INTO THE EDITOR

INTRODUCTION

After the Editor has been turned on, the operational program loaded, the size of the string storage selected, and operational status line conditions chosen, information can be fed into the text buffer. Methods of entering information from the keyboard and read cassette station are explained in this section.

LEARNING GOALS

At the completion of this section you will be able to:

1. Use the keyboards to *enter commands and information, and to edit.*
2. *Cancel* commands.
3. *Read* tape cassettes.
4. *Search* for information on cassettes.
5. Explain cassette *messages.*
6. *Rewind* cassettes.

ENTERING INFORMATION FROM THE KEYBOARD

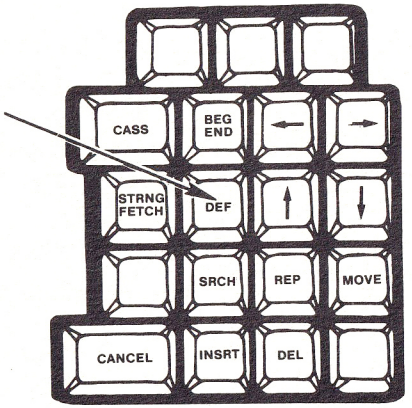
The Editor keyboard consists of two parts.

1. Main typesetting keyboard - this keyboard is the same as the one used on the Quadritek 1200. Changes that appear in the edited text are entered through these keys. None of these keys control the Editor's operation.
2. Editing keyboard - All editing commands, functions of the VDT, the buffers, and the cassette drives are controlled by this keyboard.

COMMANDS

Commands are keyboarded the same as they are on the Quadritek. There are only two command keys.

1. Cassette key (CASS) - This key controls most Editor functions. It is used to restart the program, set the input and output modes, search for and replace information, send out information, and control the movement of the cassette drives.
2. Define key (DEF) - This key allows the operator to indicate areas of text shown on the VDT that are to be edited. Information that has been defined will blink on and off.



COMMAND SEQUENCE

- Commands are given by pressing the CASS or DEF keys and then entering a mnemonic code.
- Because Editor commands are not inserted in the text, they may be given at any time. There are no "beginning-of-line" Editor commands.
- As the cassette and define commands are keyboarded they are displayed at the beginning of the operational status line.

CANCELLING COMMANDS

- Cassette and define commands can be cancelled before they are completed by pressing the cancel key.

Define commands that have been completed (a portion of the text has been defined, is blinking, but no action has been taken on the defined area) can be cancelled by pressing the define key and then the cancel key.

TEXT

Text is keyboarded on the main keyboard just as it is on the Quadritek 1200.

- The end-line (E) command does not have to be entered. When information is keyboarded the operator need only enter end-paragraph, left, right, or center commands where they are appropriate.

The Editor, because it is not used to typeset, does not have fonts and it stores no width values in its memory. It cannot count down the picas and points remaining in a line as it is typed. Therefore, the end-line command is not entered. (There may be end-line commands in the tape being edited.) These will be inserted by the Quadritek 1200 when the information is played back in the automatic line-ending mode.

- Commands are not checked for accuracy by the Editor. Therefore, commands can be entered incorrectly and the keyboard will not lock and no "beep" will sound.
- When the VDT lines are full, data will automatically scroll up to allow additional lines to be keyed. The information may be sent to the output at any time.
- When keyboard information is entered immediately following loading of the program or a re-start, the proper line-wrap or word wrap display will not be shown on the VDT until one of the editing keys is pressed (cancel, delete, etc.) The easiest way to initiate the proper display is to press the insert (INSRT) key and then one of the cursor keys.

ENTERING INFORMATION FROM MAGNETIC TAPE CASSETTES

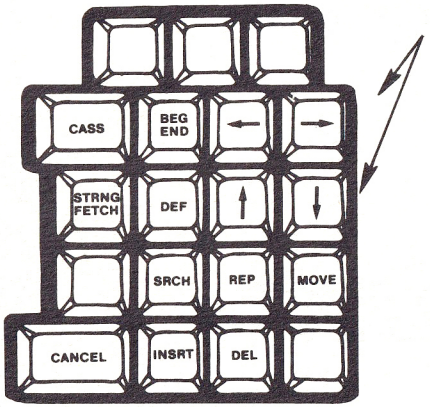
To use the cassette drives the operator must choose the cassette input and output modes and then read information from a cassette. As explained in the previous section, the input modes are CASSIN: AUTOMATIC, MANUAL, and NONE, and the commands used to enter these modes are ⅋cia, ⅋cim, ⅋cin. Automatic and manual input modes both work in the same way.

The output modes are AUTOMATIC, MANUAL, and NONE and are entered by using the commands ⅋coa, ⅋com, and ⅋con.

Pre-recorded cassette information can be loaded in two ways:

READ CASSETTE BY CURSOR

- Cursor controlled input - The Editor cursor keys include an up (↑) and a down (↓) key. The down key controls loading of information from a cassette. Each time the down key is pressed one line of data is read from the cassette and placed in the text buffer. Information can be read continuously until the text buffer is full or there is no more data on the tape.



READ CASSETTE BY DEFINED SEARCH

- Input by searching - A string of information can be defined and searched for on the cassette. Information is read into the text buffer until the string is located, no more data is available, or the buffer is full.

To load by searching for defined information:

1. Press the cassette key and enter the mnemonic code for "define search," "ds."
2. Enter the information to be searched for. Up to 58 characters can be entered, including all upper and lower case characters and commands.
3. Press the CASS key to indicate that the string is complete. As the command is completed the SRCH message will appear on the second line of the VDT, followed by the information to be sought.

   ds (up to 58 characters)

4. Press the SEARCH (SRCH) key.

   If the defined information is found it will be shown on the first VDT text line, with the cursor placed over the first character after the end of the string. Because data is read a line at a time from the cassette the amount of information that is displayed after the string will vary. This depends on the position of the end of the string in the last line that is read.

BUFFER FULL

Information from the keyboard or a cassette can be loaded into the text buffer until the buffer is full. When this happens the message "FULL" will be displayed in the operational status line. An additional 960 characters of space have been reserved in the mini-computer memory so that, after the text buffer is full, limited editing changes can be made. When the 960 characters have been used up the message "NO ROOM" will appear. If a string-fetch is attempted and the data will not fit, the message "WILL NOT FIT" will be given. Strikeover and deletion changes that require no more room can be made but no new data can be entered. Pressing editing keys will give the message "REQUIRE OUTPUT" and only the command to send out information can be given.

REWINDING CASSETTES

Tape cassettes are rewound in the same way as they are on the Quadritek.

To rewind a cassette:

1. Press the CASS key.
2. Enter the menemonic for "cassette rewind," "cr"
3. Enter the number "1" to indicate the read station, "2" to rewind the write cassete, or "b" to rewind both.

$\overset{C}{A}$cr1, $\overset{C}{A}$cr2, or $\overset{C}{A}$crb

ENTERING INFORMATION

Action 1

Load or re-start the program and enter a string storage size of 9,000 characters.

$\overset{C}{A}$rs 9

```
YOU HAVE 12000 CHARS SPACE AVAILABLE.
MINIMUM/MAXIMUM ALLOWABLE STRING STORAGE IS 1000/9000
ENTER SIZE OF STRING BUFFER IN THOUSANDS?9
```

Action 2

Remove any cassettes that are in the cassette stations. Keyboard the following sentence. If you make a mistake do not try to correct it at this time.

> ⌊3500§120⁋2The Editor⁋⁋⁋1§100The Editor terminal is designed to edit information that has been recorded on the Quadritek 1200. The Editor is also used to create new "unjustified" output for replay on the Quadrditek.⁋

Feedback

Information entered from the keyboard, immediately following loading or re-initialization of the program, is not shown in the line-wrap or word-wrap format. Proper display occurs when the first editing function or Editor command is entered.

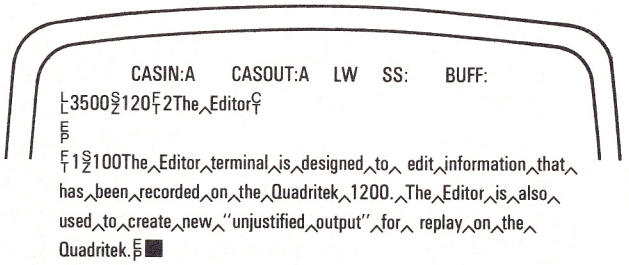
Action 3

To initiate the line wrap display, press the insert key and then one of the cursor keys.

INSRT ↑

Feedback

The information is now shown in the line wrap VDT display mode.



Action 4

Press the cursor-up key once, to move the cursor to the previous line of text.

↑

Feedback

The cursor moves up without going to the end of the line as it does on the Quadritek. This allows you to move from line to line much quicker.

Action 5

Move the cursor from place to place in the line, pressing the up and down keys once and also holding them for continuous cursor movement. Note changes in the operational status line.

Feedback

Because only one sentence is contained in the text buffer, you quickly moved from the top to the bottom of the buffer and the status line showed BUFF:TOP and BUFF:BOT. The message "NO CASSETTE" appeared when you moved to the bottom of the buffer using the cursor-down key. This is the key that is used to call information from the read cassette. There is no cassette in the read station so that is the why the message was displayed.

Action 6

Even though no cassettes have been loaded, **press the CASS key and enter the mnemonic for cassette rewind.**

cr

Feedback

The portion of the function that has been entered is in the first zone of the status line. But, no cassettes have been loaded so let's change our mind and cancel the command.

Action 7

Erase the cassette function by pressing the cancel key.

CANCEL

Feedback

A cassette function is cancelled with one keystroke.

Action 8

Now, insure that the cursor is at the end of the text, and continue entering information from the keyboard. Type the following:

Large amounts of information can be examined and corrected.A few facts about Editor operation:-Data is entered from a keyboard or a magnetic tape cassette.All Editor functions are controlled by only two command keys; -Editor commands are not inserted in the text and end-line commands are entered only for use by the Quadritek.A status line keeps the operator informed about operating conditions.ej

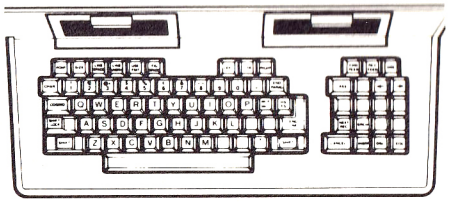
```
CASIN:A    CASOUT:A    LW    SS:    BUFF:TOP:
3500120 2The Editor
1 100The Editor terminal is designed to edit information that
has been recorded on the Quadritek 1200. The Editor is also
used to create new "unjustified output" for replay on the
Quadritek.
Large amounts of information can be examined and corrected.
A few facts about Editor operation:
-Data is entered from a keyboard or a magnetic tape cassette.
All Editor functions are controlled by only two command keys;
the define key and the cassette key.
-Editor commands are not inserted in the text and end-line
commands are entered only for use by the Quadritek.
A status line keeps the operator informed about operating
conditions.
ej
```

Action 9

Place a blank cassette in the write station and rewind it.

ÇAcr2

Write Station



Feedback

Rewind functions are the same for the Editor and Quadritek 1200. The message "2 REWOUND" will appear at the right of the operational status line when the rewind operation is complete.

Action 10

Insure that the cursor is at the end of the text you have and then enter the following command.

ÇAot

Feedback

This is the "output text" command. It will be discussed in detail later. At this time we are merely putting information on a cassette so that we will have recorded data that can be entered at the read station. As the information is recorded the message "OUTPUTTING" is displayed.

Note that the VDT no longer displays the text you keyboarded. It has been sent to the write cassette and the text buffer is empty. The messsage "OUTPUT DONE" is displayed.

Action 11

Rewind the cassette.

ÇAcr2

Feedback

The message "REMOVE CASS 2" indicates that a newly recorded cassette has just been rewound. It should be removed to prevent accidental erasure of the data.

Action 12

Remove the cassette from the write station and place it in the read station.

Action 13

Rewind the cassette.

ÇAcr1

Action 14

Prepare to automatically read the information from the cassette by entering a "define-search" for the last word in the text.

ds ej

Feedback

Note that the text will now begin on the third line and the second line contains the search definition.

Action 15

Press the search key.

SRCH

Feedback

Information was read from the tape until the search string was found. Note that the Editor inserted an end-line at the end of the job (its's under the cursor). This insures that all text ends with a line ending code. This would not have been inserted if the search string was in the middle of the text and there was data yet to be read from the cassette.

Action 16

Rewind the cassette.

cr1

Action 17

Initiate the search again, noting the message "DATA NOT READY" that appears momentarily as the Editor begins looking for information on the cassette.

SRCH

Action 18

Note the message at the end of the operational status line. "NO MORE DATA" indicates that the end of the information has been found.

CASIN:A CASOUT:A LW SS: BUFF:BOT: NO MORE DATA

Action 19

Rewind the read cassette.

Action 20

Once again initiate a search and watch the movement of data on the VDT.

SRCH

Action 21

Rewind the read cassette.

$\overset{C}{\underset{A}{}}$cr1

Action 22

Data can also be read from a cassette by using the cursor-down key. Press the down key once.

↓

Feedback

Information was read from the cassette and displayed on the VDT.

Action 23

Read in the remaining data by holding down the cursor-down key.

Feedback

When all of the information was read the message "NO MORE DATA" was displayed. Note that the status line now shows "BUFF:BOT:FULL," indicating that the VDT is now displaying the bottom of the text buffer and that the buffer is full.

This was the fourth time that the block of information had been entered into the text buffer. You'll recall that a string storage area of 9,000 characters was designated after the program was loaded, leaving 3,000 characters of space for text. The 9,000 characters have entered the text buffer. No more data may be read from the cassette. Editing changes, up to 960 characters, can be entered.

Action 24

"Write protect" and save the cassette. The information stored on it will be used in the next set of Action/Feedbacks.

REVIEW

1. The two Editor command keys are the _____ key and the _____ key.

2. What Editor commands must be given at the beginning of a line?

   _____

   _____

   _____

3. When keyboarding information to be used by the Quadritek what does the Editor do when an incorrect or invalid command is entered?

   _____

   _____

4. Information can be read into the text buffer by_____

   or _____.

5. Up to _____ characters can be defined in a search operation.

6. To rewind the write cassette, keyboard _____.

7. When the message BUFF: FULL appears _____ more characters can be entered from _____.

8. When no more information can be stored in the text buffer, the message _____ appears on the VDT.

9. To rewind the read cassette, keyboard _____.

ANSWERS

1. CASS: DEF

2. None. Editor commands do not go in the text and can be entered anytime.

3. Nothing; commands are not checked by the Editor.

4. pressing the cursor-down key or defining and starting a search.

5. 58

6. Ξcr2

7. 960, the keyboard

8. "REQUIRE OUTPUT"

9. Ξcr1

You now know how the Editor works in the first stage of operation — entering information.

You have seen:

- how commands and information are entered at the keyboard.
- how cassette commands are cancelled
- how cassette data is entered, using both cursor control and the define search
- how cassettes are rewound

Now that information has been entered you can proceed to the second stage of operation — editing the contents of the text buffer.

EDITING INFORMATION

After data has been loaded into the text buffer and is displayed on the VDT, editing may begin. The Editor is designed to allow the operator to easily move through the text buffer and revise information in preparation for recording on a tape cassette.

LEARNING GOALS

After completing this section you will be able to:

1. Define *scrolling.*
2. Use keys and commands to *move anywhere in the text buffer.*
3. *Insert, delete,* and *move* information in the text.
4. *Store* and *use strings* of information.
5. *Search* for and *replace* information.

EDITOR CAPABILITIES

The Editor can:

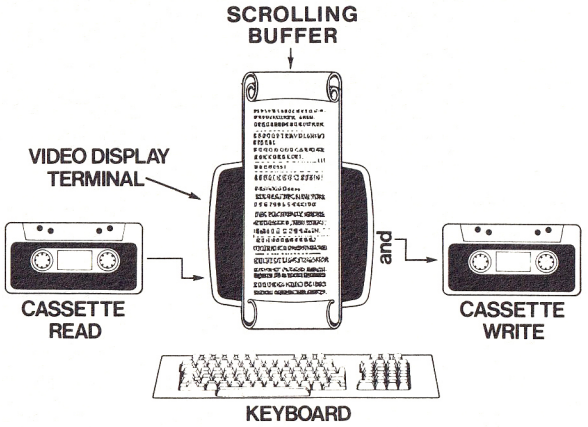
- Delete specific information, as defined by the operator.
- Move information from one part of the text to another.
- Insert characters.
- Store up to 99 different strings of information for later use.
- Search for information, up to 58 characters long.
- Search for and replace information with a replacement string of up to 58 characters.

MOVING ABOUT IN THE TEXT BUFFER

The operator of the Editor has three ways to move from one part of the text to another to inspect information and to make changes. Moves may be from one character to another, from one part of the VDT display to another, or from the portion of the text shown on the VDT to a part not displayed.

To move from a part of the text that is displayed, so that another part of the text appears on the VDT involves SCROLLING. You may have noticed, as information was loaded into the Editor memory, that when all the VDT lines were filled the top line disappeared and new lines appeared at the bottom of the display. The same disappearance and appearance of full lines occurs when the operator moves from an area that is displayed to one that is not yet on the VDT.

Because the movement of lines up or down the VDT resembles the rolling of a scroll of written material it is called "scrolling." Both forward and backward movement is possible.



The Cursor

The Editor cursor is the primary control of movement in the text buffer and the indicator used for making editing changes.

- Cursor movement is controlled by four keys on the auxiliary keyboard. The left and right (← →) keys work as they do on the Quadritek 1200, moving the cursor across a line. The up and down keys (↓ ↑) move the cursor from one line to another, anywhere in the line.
- The cursor moves one character at a time when a cursor key is pressed once. Continuous movement of the cursor occurs when a cursor control key is held down.

Scrolling

Scrolling Up – To move the information displayed upward, move the cursor to the line on the VDT. Then press the cursor down key. Once line or continuous scrolling is possible.

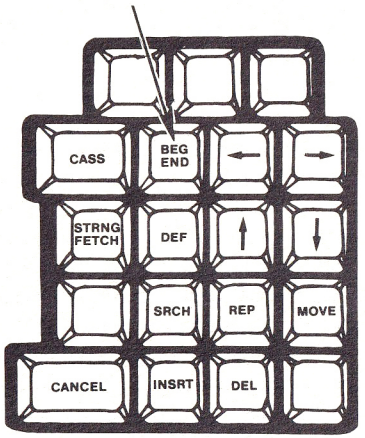
↓

Scrolling down – Move the cursor to the top line and press the cursor - up key. Single line or continuous scrolling is possible.

↑

BEG/END KEY

The Beginning/End key at the top of the auxiliary keyboard moves the cursor to the beginning or end of the text shown on the VDT. The cursor will move to the beginning of the information displayed from any character on any line. The cursor will move to the end of the display only from the beginning character. Press the BEG/END key once to go to the first displayed character, twice to go to the last character.



TOP OF TEXT COMMAND

The operator can move to the top of the text buffer by entering a top-of-text command.

The first lines of the text buffer will be displayed on the VDT with the cursor positioned over the first character of the first line. This allows quick movement to the beginning of the buffer when working with large amounts of information.

1. Press the cassette key.
2. Enter the mnemonic for "top-of-text," "tt"

CAtt

MOVING ABOUT IN THE TEXT BUFFER

Action 1

Restart the program and enter a string storage buffer size of 9,000 characters.

CArs9

Action 2

Place the cassette you recorded in the last Action/Feedback section in the read station, insure that it is rewound, and then read its contents into the text buffer, using the search function.

CAds CDejLEC A

SRCH

Feedback

The message "NO MORE DATA" appeared when all the information had been read.

Action 3

Do not move the cursor. **Keyboard the following:**

The editing keys are:
1. The insert (INSRT) key.
2. The delete (DEL) key.
3. The cancel (CANCEL) key.

It is also possible to make corrections by overstriking characters.
The editing program also has these special functions:
A-Define and delete.
B-Define and move.
C-Store strings of information.
Up to 99 strings can be entered.
D-Fetch stored strings.
These strings can be called up as often as needed.
E-Search.
F-Search and replace.
The Editor can search for specific information and then replace it with other specified information.

Action 4

Press the cursor-up key to return the cursor to the top VDT line and then press the cursor-up key once more.

Feedback

The text moved down one line. The last line moved off the VDT and a line entered the display at the top line. This is "scrolling" of text.

Action 5

Hold down the cursor-up key and scroll through the text buffer until you reach the first line of the buffer.

```
CASIN:A    CASOUT:A    LW    SS:    BUFF:BOT:  NO MORE DATA
SRCH:
has been recorded on the Quadritek 1200. The Editor is also
used to create new "unjustified output" for replay on the
Quadritek.
Large amounts of information can be examined and corrected.
A few facts about Editor operation:
-Data is entered from a keyboard or a magnetic tape cassette.
All Editor functions are controlled by only two command keys;
the define key and the cassette key.
-Editor commands are not inserted in the text and end-line
 commands are entered only for use by the Quadritek.
 A status line keeps the operator informed about operating
 conditions.
```

```
CASIN:A    CASOUT:A    LW    SS:    BUFF:TOP:
The editing keys are:
T. The insert (INSRT) key.
2. The delete (DEL) key.
3. The cancel (CANCEL) key.
It is also possible to make corrections by overstriking
characters.
The editing program also has these special functions:
A- Define and delete.
B- Define and move.
C- Store strings of information.
Up to 99 strings can be entered.
D- Fetch stored strings.
These strings can be called up as often as needed.
E- Search.
F- Search and replace.
The Editor can search for specific infor
mation and then replace it with other specific information.
```

Action 6

At the top of the text buffer, the "beep" sounded and the status line showed BUFF:TOP.

Action 7

Use the cursor keys to move through the text several times. Familiarize yourself with the way lines of information move on and off the VDT as the cursor keys are used. Remember that when you use the cursor-down key at the bottom of the buffer the Editor will try to read data from the read cassette.

Action 8

Scroll to the bottom of the text. A quick return to the top of the text buffer is possible by using the "top of text" command.

Action 9

Enter the "top of text" command and note how quickly the Editor returns to the beginning of the buffer.

Ctt

Feedback

The text buffer now contains less than 3,000 characters. When large amounts of data are being examined, scrolling to the beginning of the text can be time consuming. This command allows rapid movement.

Action 10

Move the cursor to a position in the middle of the text that is shown on the VDT and then press the begining/end key once.

BEG/END

Action 11

Note the new position of the cursor and then press the key again.

BEG/END

Feedback

The first time the key was pressed the cursor moved to the first character of the text on the VDT. The second time the cursor moved to the end of the text. This key allows quick movement to the top or bottom of the *displayed* information.

CHANGING THE TEXT

Editing is done by inserting, deleting, moving, or replacing information. Strings of characters can also be stored and recalled for placement in the text at a later time.

INSERTING INFORMATION

The INSRT function works basically as it does on the Quadritek 1200.

1. Move the cursor to the place in the text where information is to be inserted. Insertion will be between the character under the cursor and the character to the left of the cursor.
2. Press the INSRT key.
3. Keyboard the material to be inserted.
4. Press one of the cursor control keys to complete the insertion.

EDITING INFORMATION

Action 12

Return to the top of the text.

Action 13

Move the cursor to a position in the third line, over the letter "E" in the word "Editor," and press the insert key.

(INSRT)

Action 14

Keyboard the following:

Itek^

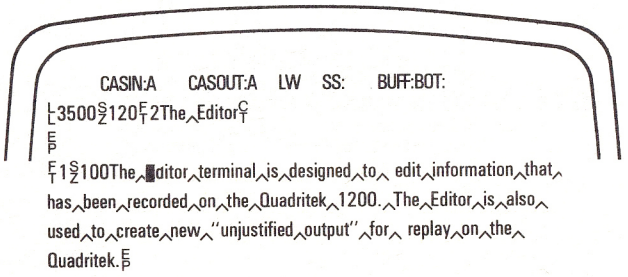
Action 15

Press the cursor-right key.

→

Feedback

The word was inserted between the character under the cursor and the character to its left. This key works the same as it does on the Quadritek. However, to end the insertion, any cursor key is used rather than an EOC key.



CANCELLING

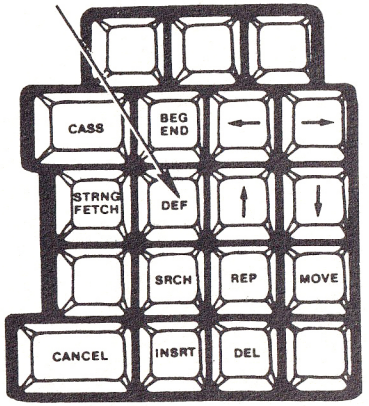
The CANCEL key works the same as it does on the Quadritek. The first time the key is pressed, the character to the left of the cursor is cancelled. Use of the key after that will remove words and the word space preceeding them.

DEFINING TEXT

Blocks of information can be moved, deleted, or placed in string storage. To do this, it must first be pointed out or defined by the operator.

To define a block of text:

1. Position the material to be defined so that all of it is displayed on the VDT.
2. Position the cursor over the first character of the area being defined.
3. Press the define key DEF
4. Press the key of the last character or command of the area being defined. Steps 3 and 4 may be repeated several times to define a block where the last character or command appears several times. When information is defined it will begin blinking.
5. The blinking information may then be deleted, moved, sent to the output, or placed in string storage.



- Only information displayed on the VDT can be defined.
- If the character or command that is designated after pressing the define key is not on the VDT, all the information on the VDT following the cursor will be defined.
- The define command can be cancelled by pressing the define key and then the cancel key. The area will stop blinking.

DELETING INFORMATION

To delete blocks of information from the text buffer:

1. Insure that the area to be deleted is defined and blinking.
2. Press the delete key on the editing keyboard.

DEL

- One character at a time may be deleted, as it is on the Quadritek 1200, by placing the cursor over the character and pressing the delete key.

Action 16

Move the cursor over the first letter in the word "terminal" and press the delete key 9 times.

DEL DEL DEL DEL DEL DEL DEL DEL DEL

Feedback

The word and word space were deleted. However, the characters were removed slowly. Continuous deletion, by holding the DEL key down, does not work as quickly as it does on the Quadritek. Removal of more than one or two letters is accomplished by using the define-and-delete function.

Action 17

Move the cursor to the beginning of the text, over the letter "T" in "The." (The Itek Editor is designed . . . ."

Action 18

Press the define key and the space bar.

DEF^

Feedback

The first word, "The," and word space began blinking. This indicates the word has been defined for editing.

Action 19

Press the delete key.

DEL

Feedback

The word and word space were deleted and the text moved to fill in the space.

Action 20

Move the cursor right, over the first letter of "Editor." Press the define key and space bar two times.

DEF^ DEF^

Action 21

Press the delete key.

DEL

Feedback

Both words were deleted. The defining operation can continue until action is taken on the blinking text. Only characters shown on the VDT can be defined.

Action 22

Move the cursor to a position over the first letter in the word "unjustified" and press the define key and the "d" key.

DEF d

Feedback

Any displayable character or command can be used in the defining operation.

Action 23

Define all of the remaining text on the VDT by again pressing the define key and then a key for a character not shown on the VDT. (FONT, CHAR, the letter 2, etc.) DEF 2

DEF 2

Feedback

All the information from the word "unjustified" to the last character on the VDT is defined and is blinking. Large blocks of data can be defined.

Action 24

Cancel the defining action by pressing the define key and then the cancel key.

DEF CANCEL

Feedback

The information stopped blinking and is no longer defined.

Action 25

Define the line near the middle of the text that reads "A few facts about Editor operation."

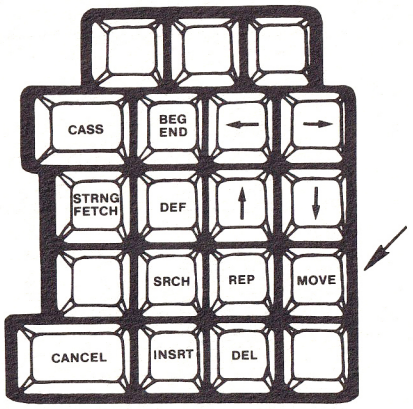
DEF ⍇

MOVING INFORMATION

To move a block of information from one place in the text to another:

1. Insure that the block of data to be moved has been defined and is blinking.
2. Position the cursor where the information is to be moved. The block will be inserted between the character under the cursor and the character to the right of the cursor. Note that this is different than the "insert" function which inserts the block to the left of the cursor. The cursor will be at the beginning or end of the moved data depending on whether the information was moved to a place before or after its old location in the text.
3. Press the MOVE key.

MOVE



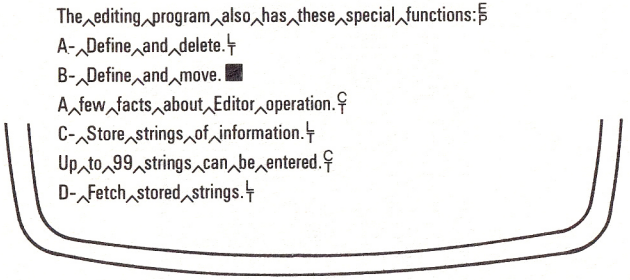
Action 26

Move the cursor down and scroll until the blinking information is off the VDT and the line "B-Define and Move.⍈" is visible.

Action 27

Position the cursor over the last character in that line (⍈) and press the move key.

MOVE



Feedback

The defined information was moved to a new position between the character under the cursor and the one left of the cursor. This function allows movement of information from any part of the text buffer to any other part. Only the new location must be displayed on the VDT. The amount of data that can be moved cannot be larger than the number of lines displayed on the VDT because that is the limit of the define function.

STORING AND USING STRINGS OF INFORMATION

The Editor can store 99 strings of information. These can be recalled at any time. The size each string can be depends on the size of the string storage area chosen when the program was loaded.

STORING STRINGS

To store a string of information:

1. Insure that the data to be stored is defined and blinking on the VDT.
2. Press the CASS key and enter the mnemonic for "store string," "ss"

   C/A ss

3. Enter a single character string identifier. This is the code used to recall the string. Any character or command that can be displayed on the VDT may be used as an identifier.

- The store-string command will appear in the first zone of the operational status line. The string identifier will appear in the SS (fifth zone) area of the VDT status line, giving a reminder of the last identifying code used.
- Strings are deleted from the text when they are placed in the string storage buffer.

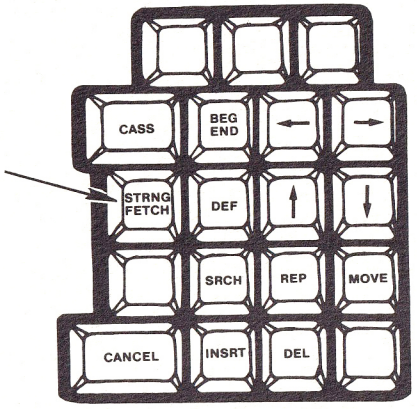
USING STORED STRINGS

Once a string of information has been placed in the string storage buffer it can be recalled at any time, as often as needed.

To use a string that is in the string storage buffer:

1. Mark, with the cursor, the place where the string is to be inserted. Strings are placed to the right of the character that is under the cursor.
2. Press the string-fetch key on the editing keyboard.

   STRING FETCH



- Strings may be recalled as many times as they are needed.
- Strings are cancelled when a new string is entered with the same identifier, the program is loaded or re-started, or the Editor is turned off.

Action 28

Once again, define the line you just moved ("A few facts about Editor operation.")

DEF ⁊

Action 29

Place the blinking information in string storage "A" by keyboarding the command to store a string with the identifer "A."

⁊ssA

Feedback

The string was removed from the text and is now in the string storage buffer. The identifier is shown in the status line (SS:A)

Action 30

Return to the top of the text and note the information contained in the first line of text.

⁊tt

Action 31

Bring the data stored in string storage "A" to the beginning of the text by pressing the string fetch key and the identifier for the string.

STRNG FETCH A

Feedback

The string was called from storage and inserted between the character under the cursor and the character to the left of the cursor (in this case there is no previous character so the information fetched is at the very beginning of the buffer.)

Action 32

Repeat Action 31 two more times.

STRNG FETCH A STRNG FETCH A

Feedback Once stored, a string can be called up as often as it is needed.

SEARCHING AND REPLACING

The Editor can search for information just as the Quadritek 1200 can. The Editor can also locate data and replace it with new information.

DEFINE SEARCH

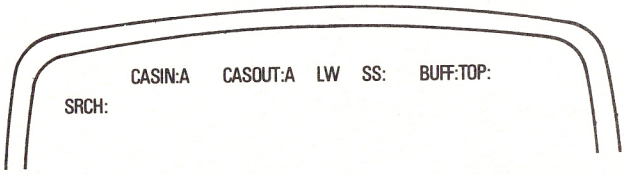
To search:

1. Define the information to be located by pressing the cassette key and entering the "define search" mnemonic, "ds". Then enter up to 58 characters and press the cassette key again to indicate the end of the string.

   ☾ds (up to 58 characters) ☾

2. Press the search key.

   SRCH

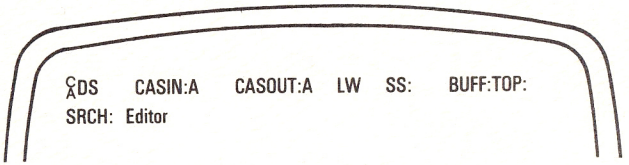


- The information to be searched for will appear on the second VDT line, preceeded by the message "SRCH."
- The search operation can be stopped at anytime by pressing the cancel key.

Action 33 **Insure that the cursor is at the beginning of the text.**

Action 34 **Define a search for the word "Editor."**

☾dsEditor☾



Feedback The message "SRCH:Editor" appeared on the second line of the VDT.

Action 35 **Begin the search.**

SRCH

Feedback The text was scrolled until the word was found. The cursor stops over the last character after the definition.

Action 36

Press the search key, noting the search action, until the cursor is at the bottom of the text buffer.

SRCH

REPLACE

The replace function allows the operator to quickly locate repetitive information and replace it with different information. For example: in several thousand words of text the word "I" appears one hundred times. It must be changed to the word "we." The search and replace combination could be used to quickly locate the word "I" where it appeared and replace it with "we."

To replace information:

1. Define a search string; the information that is to be replaced.
2. Define the replacement string by pressing the cassette key and the mnemonic for "define replace," "dr". Enter up to 58 characters and press the cassette key again to indicate the end of the string.

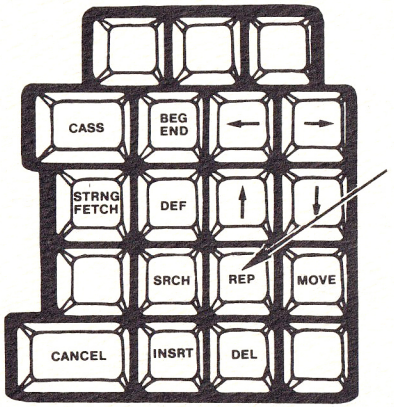
   ⁐dr (up to 58 characters) ⁐

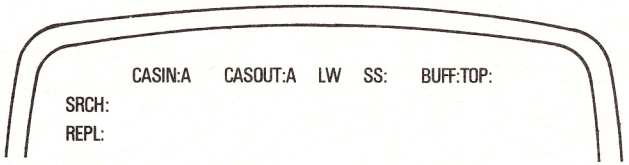
3. Press the replace key.

REP

- The replacement function can be cancelled at any time by pressing the cancel key.
- The replacement string is displayed on the third VDT line.
- The search and replacement strings are cancelled when new strings are entered, the program is reloaded or re-started, or the Editor is turned off.
- The search string or both the search and replacement string can be cleared by defining a search for nothing.

⁐ds⁐





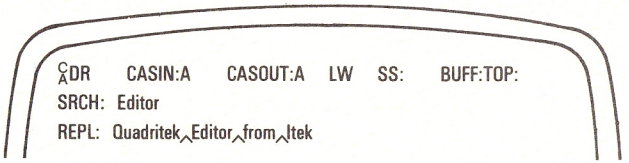
- Just the replacement string can be cancelled by defining a replacement string with no characters.

ÇdrÇ

Action 37

Define the following information, to replace the word "Editor" in the text' "Quadritek Editor from Itek."

ÇdrQuadritek Editor from ItekÇ



Feedback

The replacement string was displayed on the third line of the VDT and the line of text that has been on that line was moved off the screen.

Action 38

Return to the top of the text.

Çtt

Action 39

Press the replace key.

REP

Feedback

The Editor searched until it found the word "Editor" and replaced it with the replacement string.

Action 40

Press the search and then the replace key and note how you can scroll through the text buffer, either searching or searching and replacing.

SRCH REP

Feedback

The search and replace keys allow the operator to quickly move through the text and select only those pieces of information that must be replaced.

Action 41

Rewind the read cassette and then read information from it until the status line reads BUFF:BOT:FULL. Use either the search or the cursor function.

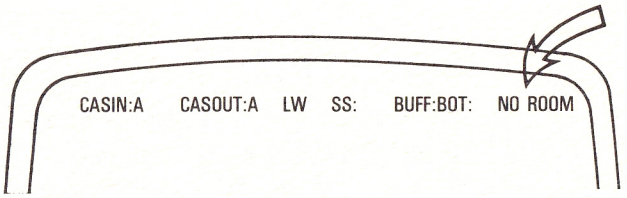
Feedback

Information has been entered and the text buffer is full. Approximately another 960 characters (15 lines) can be entered from the keyboard.

Action 42

Enter information from the keyboard until the message "NO ROOM" appears.

INSRT XXXX



Feedback

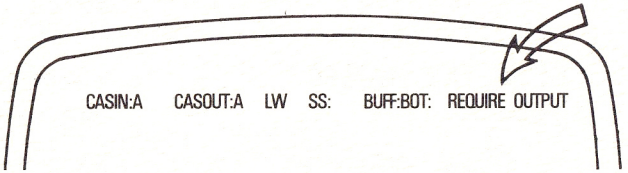
The "NO ROOM" message indicates that the additional 960 characters have been entered and there is no more room for the storage of more data in the text buffer.

Action 43

Press the INSRT key.

Feedback

The keyboard locked and the message "REQUIRE OUTPUT" appeared. No further information can be entered. The contents of the text buffer must be sent out before any more information can be entered.



REVIEW

1. To move from one part of the text to another the operator uses the cursor to _____ through the buffer. To move to the first or last character shown on the VDT, the _____ key is used. To move to the beginning of the text the command _____ is keyboarded.

2. Compare the use of the Editor INSRT key to the use of the Quadritek INSRT key.

   _____

   _____

3. Mark each of the following statements true or false: only information shown on the VDT can be defined. _____ Data may be defined a character at a time a word at a time, a sentence at a time, or in blocks. _____ Typesetting commands cannot be defined _____ Once information is defined and blinking, it may be deleted, moved, or placed in string storage. _____

4. List the steps used to move information. _____

   _____

   _____

   _____

   _____

5. True or False?
   When a string of information is placed in string storage, it is deleted from the text.

ANSWERS

1. scroll BEG/END Ctt

2. Information is inserted in the same way.
   The Editor cursor keys replace the quadritek EOC key.

3. T T F F

4. 1. Define the information
   2. Move the cursor over the character to the left of the new location.
   3. Press the MOVE key.

5. True

6. A search string can be up to _____ characters long and is displayed _____.

7. Write the keyboard command that would be used to define a replacement string that read "search and replace."

8. To use information in the string storage area,_____ keys must be pressed. (Name the key/s.)

6. 58, on the second VDT line

7. &r search and replace&

8. two, STRING FETCH and the key used as the string identifier.

You now know how to enter information and edit it.

You have seen:

- how scrolling works.
- how to move from one part of the text to another.
- how to insert, define, delete, and move information.
- how to store and use strings of data.
- how to search for and replace parts of the text.

The next section of this learning program explains the last step in Editor operation; how to record the edited information on a tape cassette so it can be used on a Quadritek phototypesetter.

THE OUTPUT: RECORDING INFORMATION

The final step in Editor operation is recording your edited information on a magnetic tape cassette so that it can be used on a Quadritek phototypesetter.

OUTPUT MODE

You'll recall that the output modes are automatic manual, and none. These are entered by using the commands ⁊coa, ⁊com, or ⁊con. Cassettes recorded in the automatic mode have "packed" information of exactly 200 characters per record. Tapes made in the manual mode are recorded the same as they are on the Quadritek 1200, with each record ending with an end-line command. Tapes recorded in either of these modes should be played back on the Quadritek in the automatic line-ending mode.

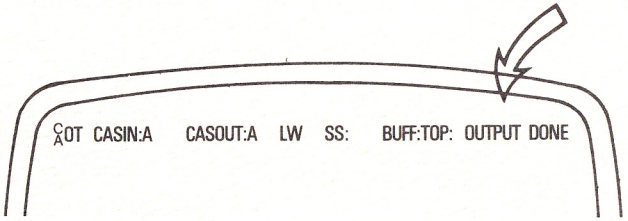
OUTPUT TEXT COMMAND

The operator can record either all or part of the contents of the text buffer.

To transfer all of the text buffer information to the write cassette:

1. Verify that the output mode is CASOUT:A or CASOUT:M.
2. Position the cursor at the end of the text.
3. Press the cassette key and enter the mnemonic code for "output text" – "ot"

⁊ot



- The message "OUTPUT DONE" will appear on the VDT when the operation is complete.
- Information up to, but not under, the cursor will be sent to the write station.
- The output includes all information from the first character at the top of the text, up to the cursor. Data does not have to be displayed on the VDT to be sent to the write cassette. However, blinking, defined text that is off the VDT cannot be sent to the output because it is awaiting editing. If an output is attempted the message "DEF OFF CRT" will be displayed.

To send a part of the text buffer to the write station:

1. Define the information.
2. Enter the "output text" command DEF

- The message "OUTPUT DONE" will appear when the operation is complete.
- Only information shown on the VDT can be sent to the write cassette.
- Information may not be written immediately. Short blocks (under 200 characters) will be held until additional characters from the next output are added. Then the information will be written on the cassette. This allows "packing" and writing of a record at a time and maximum storage of data. Just before the write cassette is rewound, any information that is being held will be written on the tape, even if it contains less than 200 characters. This insures that no data that has been sent to the output is left off of the write cassette.

END-JOB

Rewinding Cassettes

At the completion of any write operation, a cassette must be rewound in the write station. An end-of-file mark is placed on the tape at that time to indicate the end of usable information. If rewinding is not done in the write station, information may be lost and no end-of-file mark will be placed on the tape.

Copying Cassettes

A cassette in the read station can be copied on a cassette in the write station. This is done the same way it is on the Quadritek 1200, by keyboarding the command to "copy cassette"

$^{C}_{A}$cc

- Data does not appear on the VDT.

Erasing Cassettes

A cassette in the write station may be erased. This operation is the same as it is on the Quadritek 1200, and is accomplished by entering the command to "cassette erase".

$^{C}_{A}$ce

THE OUTPUT

Action 1

Load or restart the Editor operating program and indicate a string storage area of one thousand characters.

Action 2

Remove any cassette from the read station, place a blank cassette in the write station, and rewind it.

cr2

Action 3

Keyboard the following:

4000150 1 The Quadritek Editor from Itek 100.

Operating the Editor involves only three basic steps: 1. Put information into the buffer. 2. Edit the information. 3. Send the edited information out. Data is read into the Editor from the "read" cassette station or is typed on the keyboard. The editing functions allow information to be inserted, cancelled, or deleted just as it is on the Quadritek 1200. The delete key also can erase blocks of information when it is used after the block has been "defined." The Editor can move information search, replace, and store strings for later use. Up to 11,000 characters can be stored in the text buffer and from 1,000 to 9,000 characters can be stored in the string storage buffer, allowing total storage of 12,000 characters. Once information has been edited, it is copied on the output cassette, so that the edited text can be phototypeset by a Quadritek 1200. ej

Action 4

Inspect the text and correct any errors.

Feedback

After editing, the information can be sent out to the write cassette in two ways. The operator can define and record specific parts of the text or place the cursor at the end of the blocks of data that are to be placed on the write cassette.

Action 5

Return to the top of the text.

$^{C}_{A}$tt

Action 6

Define the headline "The Quadritek Editor from Itek$^{C}_{f}$."

DEF$^{C}_{f}$

Action 7

Send this line from the text buffer to the write cassette by entering the command to "output text".

$^{C}_{A}$ot

Feedback

The message "OUTPUTTING" appeared, followed by "OUTPUT DONE".

Action 8

Examine the VDT and note that the line is no longer contained in the text buffer.

Action 9

Move the cursor to the end of the paragraph ("3. Send the edited information out.$^{E}_{p}$") and place the cursor over the end-paragraph command.

Action 10

Enter the output command again.

$^{C}_{A}$ot

Feedback

All the information preceeding the cursor was recorded on the read cassette. The information under the cursor and following it was not part of the output.

Action 11

Move the cursor to the end of the text and give the output-text command. Again, rewind the cassette, remove it, and play it on a Quadritek 1200. Compare the typeset copy to the example.

The Quadritek Editor from Itek

Operating the Editor involves only three basic steps.

1. Information is put into the Editor buffer.
2. The information is edited.
3. The information is recorded on a cassette for later use on a Quadritek 1200.

Data is read into the Editor from the "read" cassette station or is typed on the keyboard.

Just as it is on the Quadritek 1200, information can be inserted, cancelled, or deleted. The delete key can also erase blocks of information when it is used after the block has been "defined." The Editor can move information, search, replace, and store strings for later use.

Up to 11,000 characters can be stored in the text buffer and from 1,000 to 9,000 characters can be stored in the string storage buffer, allowing total storage of 12,000 characters.

Once data has been edited it is copied on the output cassette, so that the edited text can be phototypeset on a Quadritek 1200.

REVIEW

1. True or False
   - After an output text command the Editor is returned to its initial operating conditions.
   - Only text displayed on the VDT can be defined and sent to the output.
   - Editor tapes recorded in the manual output mode should be played on the Quadritek 1200 in the manual line ending mode.

2. The output-text command, when information is not defined, sends out information from what part of the text buffer?

   _____

   _____

3. After a "write" operation the cassette in the write station should be rewound in the _____ station.

4. In the automatic output mode less than 200 characters will be written on a cassette only when _____

   _____

5. Tapes are "packed" in the _____ mode.

ANSWERS

1. – False
   - True
   - False

2. First character in the text through the character to the left of the cursor.

3. write

4. the tape is rewound in the write station after the output text command.

5. automatic

STATUS, WARNING, and ERROR MESSAGES

Messages from the Editor to the operator are displayed at the right end of the operational status line. Messages may indicate the status of a particular operation; or indicate an error by the operator, Editor, or Editor operating program.

Number Messages

Number messages indicate an error in the editing program or system. When a numbered error message appears:

1. Press the CASS key.
This re-initializes the program. When ERROR 080 appears the Editor program must be re-loaded.

Word Messages

The following chart lists the Editor word messages, when they are displayed, why they are displayed, and what the operator can do when they are shown.

MESSAGE	WHEN	WHY	WHAT TO DO
DATA NOT READY	Reading a cassette	Read operation has not found any information yet	Message will go off when information is found. Operator can take no action until tape read is complete.
NO MORE DATA	Reading a cassette	End of file has been found. No more information on the tape.	Read operation is complete. Go to next step in job.
BAD READ	Reading from cassette	Editor tried to read a tape but could not	
COPYING	Copying a Cassette	Cassette in read station is being copied on cassette in write station	Wait until "COPY DONE" message appears
COPY DONE	Copying a cassette	Copy operation has been completed	Rewind cassettes or continue work
FULL	Putting data in the text buffer	Buffer has been filled	960 more characters can be inserted Complete editing changes and send text to output.
FULL NO ROOM	Putting data in the text buffer	Buffer has been filled and 960 characters of space for editing have been entered	Send text to output (write cassette or CASOUT:N)
FULL REQUIRE OUTPUT	Editing attempted after "FULL NO ROOM"	No data can be entered	Send text to output (write cassette or CASOUT:N)
DEF OFF CRT	Giving ^ot command	Defined and blinking text is off the VDT	Find the defined text and cancel the definition Then give output command again.

MESSAGE	WHEN	WHY	WHAT TO DO
OUTPUTTING	Sending data to write cassette or NONE	No entries can be made until "OUTPUT DONE"	Wait until "OUTPUT DONE" appears
OUTPUT DONE	Output operation is complete	Indicates that operator can now make entries	Continue operation
DEF SRCH 1ST	Search key has been pressed	No search string has been defined	Define a search string and then press SRCH key
REWINDING	A cassette is being rewound	Cassette is under Editor control. No entries can be made by operator	Wait until "REWOUND" message appears
REWOUND	Cassette 1 or 2 or both have been rewound	Rewind operation is complete. Operator may make entries	Continue work
ERASING	Write station cassette is being erased	Cassette is under Editor control. No entries can be made by operator	Wait until message "2 REWOUND" appears
REMOVE CASS 2	Write cassette, has been rewound after a write operation	Information has just been written on cassette. Remove cassette to prevent accidental erasure or recording on new data	Remove the cassette from the the write station
SRINGS FULL	Attempting to store a string in the string buffer.	Not enough room left in the string buffer for the string you have defined.	Cancel the definition. The string cannot be stored unless the program is restarted and a larger string storage area is designated.

COMMAND LISTING

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
OUTPUT MODE BOTH	⁊omb	Beginning of line before any other commands. *NOTE: Operator must have a cassette in the write station (#2) or keyboard will lock.	1. Another Output Mode is inserted. Initital operating value for TOS Program is BOTH	Goes directly to BOTH. All information is typeset and recorded on cassette *Verify selected mode on VDT. OUTM:BOTH
OUTPUT MODE TYPESETTER	⁊omt	Beginning of line before any other commands.	1. Another output mode is inserted. 2. Quadritek is re-initialized, shut off or reprogrammed. *NOTE: ⁊ej (end-job) does not affect the output mode.	Goes directly to the typesetter, all information is set on the photographic paper. *Verify selected mode on VDT. OUTM:TYPE
OUTPUT MODE CASSETTE	⁊omc	Beginning of line before any other commands. *NOTE: Operator must have a cassette in the write station (#2) or keyboard will lock.	1. Another output mode is inserted. 2. Quadritek is re-initalized, shut off, or reprogrammed.	Goes directly to the cassette tape, where all information is recorded on the "write" or right-hand cassette (#2 head). *Verify selected mode on VDT. OUTM:CASS

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
OUTPUT MODE NONE	℞omn	Beginning of the line before any other commands.	1. Another output mode is inserted. 2. Quadritek is re-initialized, shut off or re-programmed.	Goes directly to NONE, where information is shown on VDT but is not recorded on cassette tape and is not typeset. (Useful for reviewing pre-recorded tapes.) OUTM:NONE
REWIND READ STATION	℞cr1	After inserting cassette in the read station, (#1 head). Beginning of line before any other commands.	Automatically cancelled, when action complete. It is a good habit to always rewind a cassette tape prior to re-moving it from the cassette drive.	Rewinds cassette to the beginning so you can read, copy, or edit it. VDT display "1 REWOUND" verifies completion.
REWIND WRITE STATION #2	℞cr2	After completion of the data to be recorded and the last ℞ej (end-job) sequence.	Automatically cancelled, when action complete. *NOTE: It is a good habit to always rewind a cassette tape prior to re-moving it from the cassette drive.	Rewinding inserts an end-of-file mark on the cassette tape, indicating the end of the recorded data. VDT display "2 REWOUND" verifies completion.
REWIND BOTH STATIONS #1 AND #2	℞crb	After inserting cassettes in the read station. (#1 head) and write station,	Automatically cancelled, when action complete. *NOTE: It is a good habit to always rewind a cassette tape prior to re-moving it from the cassette drive.	Rewinds cassettes to the beginning so you can edit, copy, or write on them. VDT display "B" REWOUND" or "REMOVE CASS 2" verifies completion.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
NEXT RECORD	NEXT REC is a special key located on the left of the auxiliary keyboard.	Where you want to retrieve information from a cassette, one line at a time.	1. Good only for one line at a time. *NOTE: Do not use NEXT RECORD when trying to rejustify copy in different size, font, line length, etc.	Reads the next line of the cassette into the input field of the VDT. Then additions, deletions, or corrections to the line can be made.
DEFINE SEARCH	^Ads (up to 32 characters).^A *NOTE: An End Line command cannot be inbedded in the middle of the search string.	Beginning of a line before any other commands. Beginning of a pre-recorded cassette so you can search to a certain point on the tape.	1. Change search definition. 2. Quadritek is re-initalized, shut off or reprogrammed. *NOTE: ^Bej (end-job) does not affect the search string.	Allows operator to enter selected word or character strings for Quadritek to locate on the cassette tape. *Search string will display on VDT.
END OF CORRECTION	EOC is a special key located on the right of the auxiliary keyboard.	After making an editing change of striking over, deleting, or inserting.	EOC is a cancelling key itself. It cancels the EDIT or INSERT keymode.	EOC brings your keyboard mode back to NORM, recalculates the LLR, and recognizes and initiates the ending commands.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
SEARCH	SRCH key is a special key located on the right side of the auxiliary keyboard.	After you have defined search for a pre-recorded cassette. *NOTE: If a search string has not been defined, the search key acts like the copy-job function. The entire job will be copied until end-job is reached; it will not execute the end-job.	1. Change define-search. 2. Quadritek is re-initialized, shut off or re-programmed. *NOTE: A search may be stopped at anytime by depressing the CANCEL key.	Quadritek scans each line on the tape,typesetting them, transferring them to a new tape, or whatever the output mode calls for, until the search string is reached. Cursor will stop on the first letter of the search string. *NOTE: Use search in the automatic line-ending mode when re-justifying information that has been previously recorded in a different size, font, length, etc.
COPY JOB	ℭcj	Beginning of a line, with cassettes in read and write stations.	1. When it reaches an ℭej (end-job). 2. When a cassette is full. *NOTE: Copy-job may be stopped at anytime by depressing the CANCEL key.	Allows operator to copy a job from a previously recorded cassette tape in output mode CASS or BOTH. *NOTE: Copy-job may be used anytime during the scanning of a job, except during a search or a copy-cassette operation.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
COPY CASSETTE	⁋cc *NOTE: Output modes are important. If Output mode is NONE or TYPE, you get a fast search. If Output mode is CASS or BOTH, it copies the cassette.	Beginning of a line, after cassettes have been put in both stations. *NOTE: Copy Cassette does not stop at search strings.	1. When it reaches end of information stored on a cassette. *NOTE: Copy Cassette does not stop on ⁋ej (end-job). *NOTE: Copy Cassette may be stopped at anytime by depressing the CANCEL key. *NOTE: Make centain you have an end-of-file mark on the tape or it will copy beyond the end of recorded information to the end of the tape.	Allows operator to copy (duplicate) a cassette or to combine two or three cassettes onto one cassette or to fast search through a tape without copying. *NOTE: The message "COPYING" will appear on the VDT during execution. When finished copying the message "COPY DONE" will appear.
CASSETTE ERASE	⁋ce	Beginning of a line after cassette has been inserted in write station.	At completion of action.	Erases all information stored on a cassette tape.
CASSETTE BACK RECORD	⁋cb# Single digit number in-indicates cassette station 1 or 2.	Where you want to back up and retrieve information from a line that has already been transferred to output field.	Self cancelling. 1. Good only for one line at a time.	Rewind cassettes one line, to bring back lines that have already left the cassette and have gone up to the output field.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
MARK POINT	§mp	At a point to be returned to later in copy. *NOTE: Only one Mark Point command can be stored at a time. Anywhere in a line.	1. Another Mark Point is selected. 2. Typesetting goes over 14 inches (84 picas) from point selected. 3. §ej (end-job). 4. Quadritek is re-initialized, shut off or re-programmed.	Stores the location of a reference point in the copy to be returned to at a later time in the job. Message "TOO FAR" displayed after 12 inches has been used.
RETURN POINT	§rp	When you want to return to the stored mark-point location. Anywhere in a line. All of the line will be returned to the mark-point.		Photo paper is reverse fed or forward fed until mark-point is reached. Lines up on the same baseline as mark-point.
TAB SET	§ts	This command must be the first command on a line preceding all other commands.	1. New tab widths are entered. 2. §ej (end-job). 3. Quadritek is re-initialized. shut off, or re-programmed.	Tab-set command is necessary to initiate any tab command.
TAB WIDTH	§tw##### 5 digits, Two for picas, Two points, and one for tenths of a point.	After §ts use §tw to establish widths (line length) of each tab column.	1. New tab widths are entered. 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or re-programmed.	Establishes Tab Width (mini line measure) for each tab column to be used.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
TAB QUIT	§tq	When tabular copy is finished.	1. Is a cancel command.	Tab-quite brings Quadritek back to the original full line length measure. *NOTE: Tab values will remain in Quadritek's memory.
TAB MARK	§tm	After §ts (tab-set) you type the longest line in the tab and §tm (tab mark), for each tab on the line.	1. §tq (tab-quit). 2. New tab mark values are stored. 3. §ej (end-job). 4. Quadritek is re-initialized, shut off, or re-programmed.	Defines a column by giving an example of text.
TAB PROPOR-TIONATELY	§tp	Last command on a tab set line before the end-line. *NOTE: Any white space left after setting all of the tabs will be divided proportionately between all of them.	1. §tq (tab-quit). 2. New tab proportion values are stored. 3. §ej (end-job). 4. Quadritek is re-initialized, shut off or re-programmed.	Automatically spaces the defined tab columns across the line. Columns are proportionately expanded so that they occupy the entire defined width of the line.
TAB BEGIN	§tb	Must precede all settable text in the first tab.	1. §tq (tab-quit). 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or re-programmed.	Tab-begin is used to bring the previously stored tab values into operation. Each time it puts you back in your first tab, one line below the deepest previous tab.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
COLUMN BEGIN	§cb#### 4 digits for column depth two for picas and two for points. Max. is 12 inches. (§cb 1800.)	All column commands are beginning line commands. *NOTE: Column depth and the command for entering column 1 are the same.	1. New tab-set program is entered. 2. §ej (end-job). 3. Quadritek is re-initalized, shut off or re-programmed.	The column widths and line measure, including gutters, are set using tab-set program. Sets multiple columns. Quadritek automatically reverses line space to set 2 or more columns of type beside a first column of type which has already been set.
COLUMN NEXT	§cn	At the end of a column. Beginning of line before any settable text.	1. §cq (Column-quit) To leave columnar mode	Moves you from one column to the next.
COLUMN QUIT	§cq	After you have finished typing your columns.	1. §cq (column-quit) is a cancelling code.	Ends columnar mode and brings Quadritek back to the original full line length measure. *NOTE: Column widths remain in Quadritek's memory.
FONT	§f# 1 Digit Number. Choose one of four type styles.	All fonts can be used anywhere within a line.	Each new font typed cancels the others out. *NOTE: When Quadritek is reinitalized, §ej (end-job), turned on and programmed, the Quadritek automatically selects font 1. (§f1.)	Sets copy in the type style that the operator selects.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
SIZE	§### 3 Digit Number. First two digits are points and the third digit, if utilized, indicates a ½ point.	38 different sizes may be selected, all of which can be mixed within a given line.	Each new size selected cancels the others. *NOTE: When Quadritek is re-initialized, §ej (end-job), or turned on and programmed, the Quadritek automatically selects point size 10. §100	Sets copy in the point size type that the operator selects.
LINE SPACE	§### 3 Digit Number or AU2 (automatic line spacing). First two digits are points, and the third digit is in tenths of a point.	Beginning of line before any settable text.	New line space selection cancels out other measure. *NOTE: Whe Quadritek is re-initialized, §ej (end-job), or turned on and programmed, the Quadritek automatically comes on with line space in automatic. §AU2	Sets copy with white space between each of the lines, in the amount the operator chooses.
LINE LENGTH	#### 4 Digit Number. Two for picas and two for points.	Beginning of line before any settable text.	New line length selection cancels out other measure. *NOTE: When Quadritek is re-initialized, §ej (end-job), turned on and programmed, the Quadritek automatically comes on with a Line Length of 20 picas. 2000.	Sets copy in the line measure (width between the left and right margin, up to a full 48 picas and 2 points,) that the operator selects.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
MANUAL LINE ENDING	§ma	Beginning of line before any settable text.	1. Overruled by §au. (Automatic Mode) 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or reprogrammed.	Operator makes end of line decisions.
AUTOMATIC LINE ENDING	§au	Beginning of line before any settable text. *NOTE: When Quadritek is re-initialized or turned on and programmed, the Quadritek is in the automatic mode.	1. Overruled by §ma. (manual mode)	Quadritek makes end of line decisions for justified copy, to the parameters in the format field.
EXTRA LINE SPACE	§### 3 digit number from 00.1 to 99.9 points.	Anywhere in a line. Takes effect immediately.	1. Self cancelling; good only for line being entered.	Gives operator ability to enter more line spacing than what has been programmed by the job parameters.
REDUCE LINE SPACE	§rs### 3 digit number from 00.1 to 99.9 points.	Anywhere in a line. Takes effect immediately.	Self cancelling.	Allows entry of less line space than shown in format field.
END JOB	§ej or §ej# Single digit indicates 1-9 inches of paper.	Used at the conclusion of every job. Cannot be given while in tabs.	1. Cancels itself.	Automatically moves typeset copy into paper cassette and advances 12 inches of photo paper so the job can be cut and processed. Manual mode advances 1-9 inches.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
WORD SPACING	§ws## 2 Digit number giving optimum word spacing in relative units; 01 to 99.	Beginning of line before any settable text.	1. Another word spacing command is entered. 2. §ej (end-job). 3. Quadritek is reinitialized, shut off or reprogrammed.	To change optimum spacing between words of text.
MINIMUM	§wn## 2 digit number giving the desired minimum word spacing in relative units; 01 to 99.	Beginning of line before any settable text.	1. Another minimum word spacing command is entered. 2. §ej (end-job). 3. Quadritek is reinitalized, shut off or reprogrammed.	To change minimum spacing between words of text other than the optimum (½).
MAXIMUM	§wx## 2 digit number giving the desired maximum word spacing in relative units; 01 to 99.	Beginning of line before any settable text.	1. Another maximum word spacing command is entered. 2. §ej (end-job). 3. Quadritek is reinitialized, shut off or reprogrammed.	To change maximum spacing between words of text other than the optimum (2x).

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
CHARACTER SPACING	§cs# 1 digit number in relative units; 0 to 9	Beginning of line before any settable text.	1. Another character spacing command is entered. 2. §ej (end-job). 3. Quadritek is re-initalized, shut off or reprogrammed.	Adds additional space between letters to "force" justify a line outside the justification range.
RAGGED RIGHT	§rr	Beginning of line before any settable text.	1. Until cancelled by §xr. (Cancel Raggeds) 2. §ej (end-job). 3. Quadritek is re-initalized, shut off or reprogrammed.	Type is set so it always ends on left margin and the inter-word spaces are of equal value, so line length will vary on right side.
RAGGED LEFT	§rl	Beginning of line before any other commands.	1. Until cancelled by §xr. (cancel-raggeds) 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or reprogrammed.	Type is set so it always ends on right margin and inter-word spaces are left an equal value. The lines will vary in length on left side.
RAGGED BOTH (CENTERED)	§rr§rl Enter commands for ragged right and ragged left to get ragged both.	Beginning of line before any settable text.	1. Until cancelled by §xr. (cancel-raggeds) 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or reprogrammed.	Type is set so that it ends and begins the same distance from the left and right margins and the inter-word spaces are of equal value.
CANCEL RAGGEDS	§xr	At the end of any ragged-right, left, or both copy.	1. Is a cancelling command	Takes Quadritek out of ragged mode.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
SET LEFT INDENT	ßsl# #### Indent number 1, 2, 3, or 4 PLUS 4 digits for picas and points. First two digits for picas, and last two digits for points.	Measured and set from the preceding indent except # 1 which is measured from the left margin. These are stored in Quadritek's memory.	1. New indent values are set. 2. ßej (end-job). 3. Quadritek is re-initialized, shut off or re-programmed.	Pre-set amounts of blank space starting from left margin.
SET RIGHT INDENT	ßsr#### 4 digit number, 2 for picas and 2 for points. Only one right indent can be set.	Measured and set from the right margin. Stored in Quadritek's memory.	1. New indent values are set. 2. ßej (end-job). 3. Quadritek is re-initialized, shut off or re-programmed.	Pre-sets an amount of blank space starting from right margin.
SET INDENT BOTH	ßsl# #### & ßsr#### Is a combination of one indent from left margin and right margin indent.	Measured and set from the left and from the right margin.	1. New indent values are set. 2. ßej (end-job). 3. Quadritek is re-initialized, shut off or re-programmed.	Pre-sets an amount of blank space from left and right margin of same line.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
INDENT LEFT	§il# Use 1, 2, 3, or 4; whatever indent number you need.	Anywhere in a line. If set in middle of a line, takes affect with next line.	1. New indent called. 2. Until cancelled by §xi. (cancel-indent) 3. §ej (end-job). 4. Quadritek is re-initialized, shut off or reprogrammed.	Calls out the pre-set amount of blank space from left margin.
INDENT RIGHT	§ir	*NOTE: Indent-right or indent-left will remain in effect until cancelled. Anywhere in a line. Takes affect with next line if entered in middle of a line.	1. New Indent called. 2. Until cancelled by §xi. (cancel-indent) 3. §ej (end-job). 4. Quadritek is re-initialized, shut off or reprogrammed.	Calls out the pre-set amount of blank space from right margin.
INDENT BOTH	§il#§ir Indent Left Number 1, 2, 3 or 4.	*NOTE: Only one combination can be used per line of type. Beginning of line before any settable text.	1. New indent called. 2. Until cancelled by §xi. (cancel-indent) 3. §ej (end-job). 4. Quadritek is re-initialized, shut off or reprogrammed.	Calls out the pre-set amount of blank space from left and right margin.
CANCEL INDENT	§xi	After all indent copy has been set.	1. Is a cancel command, cancels left, right, and both-indents.	Tells Quadritek to stop indenting the pre-set amount of blank space that you have indicated. Goes back to original line length. *NOTE: Does not cancel amounts stored in Quadritek's memory.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
STORE FORMAT	§sf# Use digit or character corresponding to format being stored. Used with §ef.	Beginning of line before any other commands.	1. New formats stored. 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or reprogrammed.	Stores in Quadritek's memory strings of commands and characters for later use in a job. *NOTE: Incorrect command entries can be stored in format.
END FORMAT	§ef Used with §sf	Last command on a store format line before the end-line.	1. Store new formats. 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or reprogrammed.	Tells Quadritek we are done storing a format in its memory.
USE FORMAT	U/F _____ USE FMT is a special key followed by a single character, digit, or command.	Use formats wherever required on a job.	1. Store new formats. 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or regrammed.	Tells Quadritek to use the stored formats.
REDUCE WHITE SPACE	§rw# One digit entry from 1 to 9 indicating the number of quarter relative units of reduction.		1. Initiating a different white space value. 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or reprogrammed.	Tightens line by reducing space between letters by a specified amount in ¼ relalive units.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
EXTRA WHITE SPACE	§ew# one digit entry from 1 to 9 number of quarter relative units. of expansion.		1. Initiating a different white space value. 2. §ej (end-job). 3. Quadritek is re-initialized, shut off or re-programmed.	Expands line by adding space between letters by a specified amount in ¼ relative units.
INSERT CHARACTER	§ic____ or §ic$^{c}_{H}$____ One character or digit, or special character is entered.	Quadritek will accept one or two §ic commands anywhere on the line. per line or tab.	1. It affects only the line it is used in.	Allows a specified character to fill out a space in the line. Usually used for leadering and inserting a rule.
EXTRA ESCAPEMENT	§ee## One digit, measured in 01-99 relative units.	Must preced the character that is to have white space placed in front of it. *NOTE: Must always have a character preceeding it.	1. It affects the character immediately following it only.	Adds small amounts of white space between individual characters on a selective basis.
REDUCE ESCAPEMENT	§re## One digit, measured in 01-99 relative units.	Must precede the character that is to have the white space taken out. *NOTE: Must always have a character preceeding it.	1. It affects the character immediately following it only.	Also called kerning, is the reduction of amounts of white space between characters on a selective basis.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
FIGURE SPACE	Use special command FIG SPACE key.	Use anywhere in copy where you need a fixed space of the unit value of the 0 (zero) in the font you are working in. Helpful when working with tab columns of numbers. All numbers on a font are the same width value as the 0 (zero).	1. Affects copy only where used; does not need to be cancelled.	Gives operator a fixed space in the unit value of the 0 the 0 (zero) in the font being used. used. *NOTE: Unit value of the 0 (zero) will change, depending on the font you are using.
FULL SPACE	Using lower case, depress the HS/FS key on the right side of the keyboard.	Anywhere the operator wants to establish a white space area between words or characters which will not vary when justified.	1. Affects copy only where used, does not need to be cancelled.	Places a space equal in size to one en (18 units) in the copy,. This allows the operator to insert a space into a line which will remain unchanged during justification. *NOTE: Full-space and half-space keys can be used in conjunction with each other to give the desired spacing.
HALF SPACE	Using upper case, depress the HS/FS key.	Anywhere the operator want establish a white space area between words or characters which will not vary when justified.	1. Affects copy only where used, does not need to be cancelled.	Places a space equal to ½ en (9 Units) in the copy. This space remains unchanged during justification. *NOTE: Full-space and half-space keys can be used in conjunction with each other to give the desired spacing.

COMMAND NAME	KEY-STROKES	WHERE IS IT GIVEN?	HOW CANCELLED?	WHAT EFFECT?
CANCEL FLASH	ßxf	Beginning of where you want the width value of all succeeding characters.	1. ßxn (no flash) *NOTE: Command for cancel flash, once issued, remains in effect until cancelled.	Allows for the escapement of a character's width without printing the character itself. "XF" is displayed in VDT format field.
NO FLASH	ßxn	When you want to get out of the cancel flash mode.	1. Is a cancel command.	Tells Quadritek you are out of cancel flash mode and to start printing the characters.
CANCEL ESCAPEMENT	ßxe	Anywhere in a line affects character immediately following the command.	1. Affects only the character immediately following it and is automatically self-cancelling.	Allows for the flashing of a character without the spacing (escapement) of its width value.

SYMBOLS FOR MARK-UP AND PROOFREADING

Size and Style of Type

10/ Point Size of type

w.f.// Wrong font (size or style of type)
Repeat stop mark for each additional identical error in same line

lc // Lower case Letter

lc Set in LOWER CASE

L Capital letter

caps SET IN capitals

caps+lc Lower case with initial caps

sm. caps *SET IN* small capitals

caps+s.c. SMALL CAPS WITH INITIAL CAPS

rom. Set in *roman* (or regular) type

ital. Set in italic (or oblique) type

L.F. Set in lightface type

b.f. Set in boldface type

b.f. ital. Set in *bold italic* type

3 Superior LETTER or FIGURE[3]

/4 Inferior LETTER or FIGURE$_4$

Position

Move to right

Move to left

Ragged Margin

center Put in center of line or page ctr.

f.l. or // Align type (vertically)

tr. # Transposes pace (transfer)

tr. Transpose enclosed in ring matter

tr. // Transpose (order letters of or words)

tr. Rearrange words of order numbers in (3 2 4 1)

run over Run over to next line. (A two-letter di- over vision should be avoided)

run back Run back to preceding line. (This div- ision is incorrect)

reset A syllable or short word stand- up ing alone on a line is called a up "widow"; it should be eliminat- up ed

Indent Left

Indent Right

Insertion and Deletion

OUT Insert matter omitted; refer to copy
see copy (Mark copy Out)

the/l Insert margina additions

or Delete/take out

Delete and close up

stet Let it stand—(all ~~matter~~ above dots)

Diacritical Marks; Signs; Symbols

ü Diaeresis or umlaut

é Accent acute è Accent grave

â Circumflex accent or "doghouse"

ç Cedilla or French c

ñ Tilde (Spanish); til (Portuguese)

use lig. Use ligature (affix—ffi)

/ Virgule/shill mark

Asterisk *

Leaders. . . . . .

Ellipsis . . .

Ampersand &

Spacing

/12 Line Spacing
(10/12—10 point type on 12 point line space)

solid No added line space

linespace Additional space between lines

Insert line space between lines

es Take out line space or

Close up entirely; take out space

Close up partly; leave some space

Less space between words

c/s CHARACTER SPACE

Insert space (or more space)

space out More space between words

Insert number of spaces shown

15 Line Length
(box indicates picas - 15 picas)

Paragraphing

Begin a paragraph

no ¶ No paragraph

run in Run in or run on

2 ¶ Indent the number of fixed spaces shown

hang in Hanging indention. This style should have all
1 lines after the first marked for the desired indention

Punctuation

Period or "full point."

Comma or :/ Colon

;/ Semicolon

or Apostrophe or 'single quote'

"/" Quotation marks "quotes"

?/ Question mark, ? or "query"

!/ Exclamation point!

=/ Hyphen -

1/em or /em/ One-em dash —

( ) Parentheses ( )

[ ] Brackets [ ] Braces { }

1/en or /en/ En dash –

/2 em/ Two-em dash — —

Miscellaneous

e/ Correct letter or word marked

p/⊗ Replace imperfect type

Sp Spell out (20 gr.) (Also used conversely)

G? Question of grammar

F? Question of fact

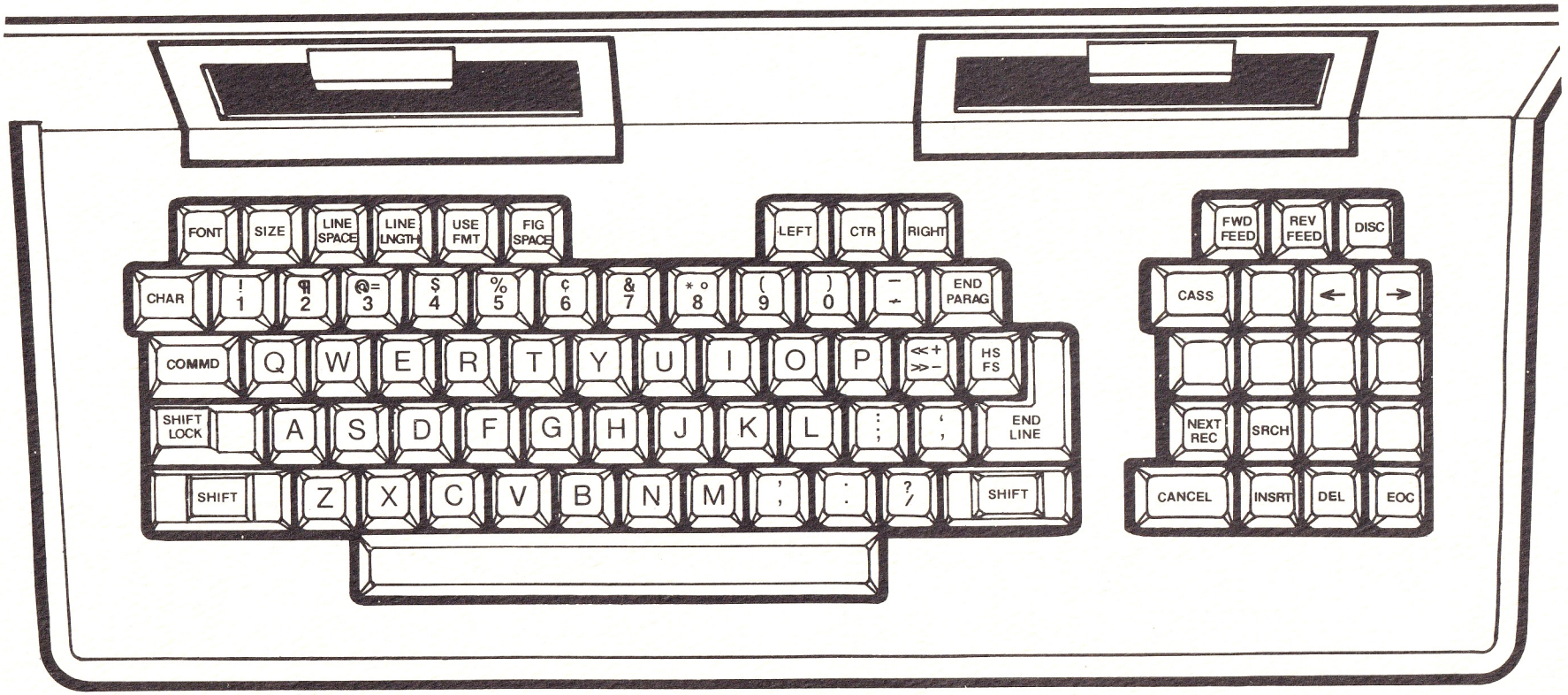
? Query to author

Qu. Ed. Query to editor

A ring around a marginal correction indicates that it is not the typesetter's error. All queries should be ringed.

OK w/c OK a/c OK "with corrections" or "as corrected" Correct and print; no revised proof wanted

Mark-off or break; start new line


FONT
SIZE
LINE SPACE
LINE LNGTH
USE FMT
FIG SPACE
LEFT
CTR
RIGHT
FWD FEED
REV FEED
DISC
CHAR
! 1
¶ 2
@= 3
$ 4
% 5
¢ 6
& 7
* ° 8
(9
) 0
— -
END PARAG
CASS
COMMD
Q W E R T Y U I O P
<< + >> -
HS FS
SHIFT LOCK
A S D F G H J K L
END LINE
NEXT REC
SRCH
SHIFT
Z X C V B N M
SHIFT
CANCEL
INSRT
DEL
EOC